How infant massage enhances pedagogical attachment in families facing challenging circumstances

Elizabeth Rouse BA Hons.

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This work or any part thereof has not previously been presented in any form to the University or to any other body whether for the purposes of assessment, publication or for any other purpose (unless otherwise indicated). Save for any express acknowledgements, references and / or bibliographies cited in this work, I confirm that the intellectual content of the work is the result of my own efforts and of no other person.

Signature…….

Date…….

Abstract

This doctoral research project aimed to contribute a needed in-depth understanding of the effects of infant massage for families around the times they faced stressful life events. It was developed in response to Bennett, Underdown and Barlow's 2013 meta-analysis and critique of studies examining the influence of infant massage on young babies' health outcomes, and their recommendation that future studies explored the effects for groups they described as 'higher risk'. The research was underpinned by five key concepts identified as potentially important themes, namely touch, intersubjectivity, attachment, resilience and infant massage.

Located in the constructivist paradigm, and using a praxeological case study methodology, this qualitative study used methods including video, storyboarding, interviews and questionnaires with families and practitioners. The central ethical issues were around the assent, consent and voices of three infant-carer dyads who participated in the filming, and addressed through an innovative matrix of approaches to informed consent, and co-interpretation of the data *with* families.

Infant massage was found to facilitate a unique multi-modal form of joint communication which I termed **'visceral interaction'**. This connectivity was set in a series of delicately balanced and nested environments (Bronfenbrenner, 1979) and was found to enhance carers' understanding of infants' cues, respect for them as individuals, and to support intersubjective and attachment relationships. Infant massage can offer families a special environment focusing on the infant-carer connection, and offering important respite from the challenges that may disrupt its development. However, the environments surrounding the families, and timing of the programme were found to be critical; the massage context needs to support infant and carer feelings of containment (Bion, 1962) and regulation (Gerhardt, 2015) as they adjust to a new life phase.

Drawing on these findings, this study recommends that future research focuses on practices which may support families' increased participation in this vital service, and that there is a move to widen the offer of compassionate, respectful and individualised services to *all* families at this critical early stage.

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Acknowledgements

This PhD explores a subject area that is extremely important to me; the earliest stages of life and the very beginnings of our relationships with our parents and carers. I believe this is a critical stage for every human being. This thesis is the end product of a true collaboration with a wide range of people to whom I am extremely grateful. I would like to extend my deepest thanks to the following people for their support of and commitment to this study:

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Chapter 1 - Introduction to the thesis

1.1 Introduction

This introductory chapter sets out the context for a doctoral study exploring the effects of infant massage amongst families facing challenging circumstances. Firstly, a researcher positioning statement is provided; an overview of my family heritage, relevant life experiences, and professional background. Secondly, the rationale for the selection of the research focus, the aims, objectives and research questions is explained. Next, the considerations informing the emerging project, and its strengths, limitations and boundaries are discussed. Finally, the project and participating children's centre sites are set against the background of recent government initiatives around services for children and families, such as the 'Troubled Families' agenda, research around the 'impact' of children's centres, funding changes, and the changing UK political environment.

1.2 Researcher positioning statement – professional background and prior experience

It is critical to this study, its transparency and trustworthiness, that I describe my position from the outset. This statement will include the life and professional experiences which I believe are relevant, influencing the selection of this study, as well as my subjectivity and interpretation of the data. I am a White British female from a professional middle class background. I am in my mid-forties, from the third generation of family members to have studied at doctoral level, and am very aware of the privilege resulting from this educational heritage.

I was born in 1971, and around this time my mother experienced postnatal depression (PND), which was by chance identified by my paternal grandfather, a GP. My mother has vivid recollections of this difficult period, as well as the scarcity of support available to families in the 1970s. Throughout this project, she has stated a belief that if children's centres had existed, and infant massage been offered to her, it is likely that she would have accessed support at a critical time.

Professionally, I have enjoyed a varied career working with young children and their families. Having completed a Postgraduate Certificate in Education (PGCE), I worked for seven years as an early years teacher with children across the Foundation Stage and Key Stage 1. I then worked for a large national children's charity, initially as a family support worker, before moving into children's centre leadership. In 2011, I completed the National Professional Qualification in Integrated Centre Leadership (NPQICL) through the Centre for Research in Early Childhood (CREC). I believe that it was here that my love for learning and academic scholarship was reignited. The following year, I embarked on a Masters in Education programme through CREC, and, although I was unable to continue with my studies due to work commitments, I knew that my MA research focus of infant massage and the discipline of academic study were areas I wanted to return to. Two years later, I applied for a bursaried PhD, jointly funded by CREC and the University of Wolverhampton. I was extremely fortunate to be offered this opportunity, which has been a transformational experience, and which I anticipate will lead to a range of teaching, learning and research opportunities.

As a teacher and former children's centre leader, I have always been keen to develop inspiring pedagogical relationships. My view is that learning should be a companionable and exciting process for all ages and stages. I believe that these values stem from deeply held views around the centrality of respectful interactions and relationships with other human beings. This ethical stance, I believe, underpins my work as an early career researcher, and is a golden thread running throughout this doctoral project.

1.3 Rationale for the research focus, aims, objectives and research questions

1.3.1 Rationale

There were three main drivers which, in combination, created the rationale for the identified research focus: 1. The professional experience and prismatic perspectives of a staff team working in children's centres. 2. A clearly articulated need to explore the influence of infant massage with a particular focus on families facing more complex challenges (Bennett, Underdown and Barlow, 2013). 3. My own professional viewpoint and life experiences (described in Section 1.2 above).

Driver 1

As a children's centre leader, I worked with a team of practitioners who were committed to the practice of infant massage as a service which supported critical early family attachments. We developed a small number of anecdotal accounts around the positive effects of infant massage, finding that some families who faced challenging circumstances appeared to respond positively to and implement infant

massage when shared through bespoke home-based sessions. However, we had concerns that families under stress may be finding it difficult to access centre-based infant massage groups offered to all families in the reach area. These observations formed the early thinking around my MA research proposal, and subsequently my PhD application.

Driver 2

At an early stage in identifying a need for this research project, I located a review by Bennett, Underdown and Barlow (2013): *'Massage for Promoting Mental and Physical Health in Typically Developing Infants Under the Age of Six Months'*. This was a meta-analysis of thirty-four randomised or quasi-randomised trials, and aimed to assess the influence of infant massage on the mental and physical health outcomes of 'healthy' infant-carer dyads in the first six months. The authors expressed significant quality concerns in relation to the majority of these; twenty studies were highlighted as being at risk of bias due to design and implementation. This affected the findings of this subset, with the effects of infant massage being either over or underrated. Additionally, the team thought that quality issues relating to many of the studies may have compromised the findings of the meta-analysis. Consequently, they were unable to endorse the practice of infant massage with *"…low-risk population groups of parents and infants. …"* (p.2). It was recommended that future research should focus on the influence of infant massage on *"…higher-risk population groups (for example, socially deprived parent-infant dyads)…"* (p.2).

Driver 3

I believe that it is critical that we acknowledge and make transparent the personal and professional heritages that, I am convinced, influence the selection of the research focus. I also think that these foundational experiences are firmly linked to the ways that we conceptualise the world (worldviews or ontologies), our beliefs around knowledge creation (epistemological standpoints), and, consequently, our methodological approaches and choices. I will set out my ontological, epistemological and methodological stances in Chapter 3, Sections 3.2, 3.3 and 3.4. It is my view that my personal and professional experiences (Section 1.2) were instrumental in developing a rationale for this doctoral research project.

1.3.2 Aims and objectives

This research project aimed to develop an enhanced understanding of and important new conceptual theory around the influence of infant massage on child-carer pedagogical relationships around times of personal challenge. The study also aimed to contribute innovative approaches to collaborative work with participants, and important findings around the utility of infant massage in early work with children and families. It was anticipated that the learning from this study would be used to develop training programmes to enhance knowledge, understanding and practice amongst early years colleagues, and to inform discussions with local and national decision-makers around effective early childhood provision. Ultimately, I believe that our youngest citizens and their families have a right to be offered services that support the early development of securely attached and respectful child-adult partnerships. I am convinced that our early relationships are foundational to our understanding of how we connect with the wider world; our functioning in

intimate relationships, groups and communities, how we manage adversity, and how we in turn parent.

1.3.3 The research questions

This section will explain the development and refinement of the main research question and seven sub-questions across the lifespan of the study. I believe that their evolution documents the shift in my thinking as I transitioned from children's centre practitioner to an emerging identity as an early career researcher.

The main research question

This doctoral study aimed to develop a deeper understanding of the influence of infant massage, focusing specifically on the benefits for families who faced challenge. The initial research title, included in the research proposal paperwork submitted in February 2014 was: *"What are the benefits of infant massage for more vulnerable children and their carers and how might the service be more effectively delivered in a children's centre context?"* (Appendix 1, p.3). Critically examining this, I question the use of terms such as 'vulnerable children' and the notion of services for children and families being 'delivered'. They suggest deficit and passivity, perhaps an echo of some of the epistemological beliefs embedded in the 'Troubled Families' programme (Section 1.5.1). To me, it is critical to this study, and to its trustworthiness, that I unflinchingly examine the development of my thinking through the project.

During the first year of the project, I had the opportunity to present at the 2015 BECERA (British Early Childhood Education Research Association) conference. My presentation *'Questioning the concept of 'vulnerability' – the challenge of finding a new term'* (Rouse, 2015) was used to reflect on the deficit models implied by terms such as 'target families' (Ofsted, 2014) and 'vulnerability', and to consider alternatives. I wanted to develop respectful phrases that recognised the stresses families faced, yet clearly located them as *external* forces. It was important to identify terminology that could be comfortably used with families; I began to look at vocabulary used in the power industry such as 'grid resiliency' (Electric Power Research Institute, 2015), and at the concepts of Appreciative Inquiry (Chapter 3, Section 3.3.3) and resilience (Chapter 2, Section 2.4.5).

According to the Paperback Oxford English Dictionary, the word 'vulnerable' means *"…exposed to being attacked or harmed."* (Waite, 2012, p.828), and use of the term in welfare and criminal justice policy has increased significantly since the mid-2000s (Brown, 2017). In the field of education, Ecclestone (2017) speaks of 'vulnerability creep', where the term has become incorporated into the fabric of policy, institutional and daily life at all levels. Vulnerability is also thought to be 'under-defined' (Jopling and Vincent, 2016), and its conceptualisation to vary greatly across disciplines (Ecclestone, 2017). Moreoever, policymakers have constructed vulnerability as caused by a broad mix of social, economic and personal issues, and this has led to it being viewed as disconnected from political influence, located in the external world, and with homogenous and measurable characteristics (Potter and Brotherton, 2013). However, academics such as McCleod (2012, p.22) are now beginning to reinterpret the concept: *"Vulnerability as openness to others evokes*

the possibility of vulnerability as tenderness, not simply pathological deficiency, and points to the compassionate dispositions of fellow citizens."

Whilst McCleod (2012) acknowledges this is an 'aspirational' stance, my view was that the term remained too connected to deficit constructions of vulnerability. Indeed, looking at the etymology of the word, 'vulnus' is the Latin term for 'wound' or 'injury' (Wade, 1997). Although the conference discussion did not generate any new vocabulary, it provided a useful opportunity to reflect with others on an important concept. Through further discussions with colleagues around infant-carer learning and bonding through massage, the research title was then refined to: *'Can infant massage offered through children's centres enhance pedagogical attachment in resilient families facing challenging circumstances?'* I define 'pedagogical attachment' as a dyadic connection incorporating a deep shared learning dimension, and facilitated through infant massage. The words 'resilient' and 'children's centres' were removed from later versions of the title as it was agreed that 'resilient' could be interpreted as patronising by potential participant families, and as the focus of the research was on the influence of infant massage itself rather than the service *in* a children's centre setting.

<u>The sub-questions</u>

A similar process of reworking was followed in relation to the seven sub-questions posed by this project. I started to develop new terms which sought to recognise yet externalise the stresses experienced by families. This marked out, in my view, a distinct ideological difference between this study and government initiatives such as

the ‘Troubled Families’ agenda (Section 1.5.1). I firmly believe that *any* family or individual can experience stressful life events at any time, and this is also an important part of the project’s stance. To reflect these views, I developed the phrase ‘families facing challenging circumstances’ which aimed to affirmatively and respectfully describe participant families and the range of challenges experienced. The seven redrafted sub-questions are set out below:

Q1. What is infant massage and what are its key features and qualities?

Q2. How and why is infant massage provided as a service to young children and their families?

Q3. What are the benefits that are claimed for infant massage, particularly for children and carers who are facing challenging circumstances?

Q4. What are the causes of difficulties in forming healthy child-carer attachments?

Q5. What are the barriers to engaging with infant massage provision?

Q6. Can infant massage, offered in a timely fashion, have a positive impact on attachment and communication between infant and carer, with a particular focus on families facing challenge or under stress?

Q7. If infant massage is shown to have a positive impact for families facing challenge or under stress, what training will we need to provide to key workers (e.g. Health Visitors, midwives, Social Care and children's centre staff) to ensure that families are supported to engage with the service?

(Appendix 2, pp. 6-8)

In turn, the research title and sub-questions informed the literature searches, the methodological choices, and the questions asked through the interviews and focus groups, data co-interpretation, questionnaires and family descriptions (Chapters 2, 3 and 5).

1.4 The emerging project (and the strengths and limitations at the outset)

In the early stages of developing the study, I had anticipated utilising a mixed methods approach; combining quantitative and qualitative methods, namely attachment assessments, video, individual interviews and focus groups (Appendix 1). However, as I discussed the study, and its aims and objectives in greater depth with my supervisory team, we agreed that the project design should be revisited. In the light of Bennett, Underdown and Barlow's (2013) meta-analysis of infant massage research, and large-scale studies of the effects of children's centres such as the *'National Evaluation of Sure Start'* (NESS) (Department for Education, 2010 - 2012), and the *'Evaluation of Children's Centres in England'* (ECCE) (Department for Education, 2009 – 2015), a niche was identified for a small-scale qualitative study examining the phenomenon of infant massage. It was agreed that the project would make fine-grained observations of the infant massage process, exploring what occurred between the infant and carer as they engaged in the practice, and

how this influenced the child-carer relationship. It was also important to consider the ethics associated with the research design and approaches used. Whilst randomised controlled trials (RCTs), formed the basis of Bennett, Underdown and Barlow's 2013 meta-analysis, this approach to research did not fit with the ontological and epistemological stances underpinning this study (Chapter 3, Section 3.2), and is critiqued in the literature review in Chapter 2.

At this early stage in planning it was critical that I considered how the study would 'get to the data'. It seemed to me that attachment assessments and parenting scales completed with large groups of families would be unlikely to offer a deepened understanding of families' experiences of infant massage. I therefore decided to read and reflect further around the methods likely to get closer to these lived experiences (Johansson, 2003; Pramling Samuelsson and Johansson, 2009). This is explored fully in Chapter 3, Sections 3.3 and 3.4. I also decided to reduce the size of the anticipated group of families from eighteen across three children's centre sites (Appendix 1) to three or four families across two sites. It was anticipated that this would facilitate a more thorough exploration of the experience of infant massage. It would also address an apparent gap in the research; the need for a fine-grained and ethical examination of the influence of infant massage, not located through the literature searches (Chapter 2).

<u>The strengths and limitations of the research</u>

This study aimed to explore the effects of infant massage amongst families at times when they faced challenge, and I believe that amongst the project's strengths is its

deep exploration of the individual experiences of the participant families. This was achieved through the careful identification and sensitive interpretation of a range of research methods (Chapter 5), and through a comprehensive approach to fully informed consent (Chapter 3). Moreover, a 'strength-based' approach to research was taken which recognised participants as capable and active co-inquirers, and which aimed to offer an affirmative and enhancing research experience. This is an orientation to practice used widely in Social Care in co-design of services with individuals (Social Care Institute for Excellence, 2015) which builds on existing strengths (Kemp *et al.*, 2014). Affirmative practice is explored further in a discussion of the principles of Action Research and Appreciative Inquiry in Chapter 3, Section 3.3.3. It is my view that this study makes important contributions to the body of knowledge and conceptual understanding around the influence and function of infant massage, and to innovative participatory research practice rooted in ethical and democratic knowledge construction (EECERA, 2014).

With regard to the limitations and boundaries of the study; although the project begins to explore the 'transferability' (Lincoln and Guba, 1985) of the experiences of infant massage through the questionnaire phase, it does not claim to be of the scale that may be required to build an evidence base supporting the use of massage programmes. It is anticipated that this doctoral project will lead to further studies in response to the themes and questions raised (Chapter 7, Section 7.6). Future work developed from the findings of this small-scale qualitative study may need to adopt a larger scale, and incorporate both quantitative and qualitative methods. The project's strengths, limitations and contributions are revisited and refined at the close of the project (Chapter 7, Section 7.4).

1.5 The political context for the study

It is important that we situate this doctoral study in the context of the political climate, as well as recent governmental agendas and research relating to support for young children and their families. In this section I will examine and discuss the 'Troubled Families' programme (Section 1.5.1) and Graham Allen's report: *'Early Intervention: The Next Steps'* (2011) (Section 1.5.2). Additionally, to provide some context for the reader in relation to the challenging environment for the children's centre sites that participated in the study, I will discuss the Early Intervention Grant (EIG) and the Evaluation of Children's Centres in England (ECCE) study (Section 1.5.3).

1.5.1 The 'Troubled Families' programme

The origins of this high profile and contentious programme can be traced back to David Cameron's *'Troubled Families Speech'* (2011), given in the aftermath of the August 2011 riots in England, as well the Conservative and Liberal Democrat Coalition Government's policy paper *'2010 to 2015 Government Policy: Support for Families'* (Department for Communities and Local Government, 2015).

'Troubled Families Speech' (2011)

Cameron's speech introduced a vision for society where families and individuals took increased personal responsibility, and were agents for positive change in their own lives. One might broadly agree with these overarching aims. Having briefly

addressed issues around the conduct of MPs, journalists and bankers, he then moved on to introduce the new initiative, making the following incendiary claims:

> Officialdom might call them 'families with multiple disadvantages'. Some in the press might call them 'neighbours from hell'. Whatever you call them, we've known for years that a relatively small number of families are the source of a large proportion of the problems in society.
>
> (Cameron, 2011)

In just a few short sentences, the former prime minister skilfully blended together families facing multiple challenges with a very small group of families and individuals with very complex needs. They became a homogenous mass, held up as the scapegoats for the economic and social challenges faced by the country. This appeared to be a deeply concerning and calculated manipulation, stoking the fears of the general public, and specifically those most affected by the challenging economic climate.

'2010 to 2015 Government Policy: Support For Families'(2015)

The Coalition Government's online paper (Department for Communities and Local Government, 2015) stated that the Troubled Families programme would collaborate with local authorities and associated agencies, targeting 120,000 'troubled families' in England to *"…turn their lives around by 2015. …"* With an allocated budget of £448 million over three years, and on a payment by results (PBR) basis, the programme had four main aims; ensuring that children in targeted families returned

to school, adults began pathways back to work, reducing 'youth crime' and 'antisocial behaviour', and minimising the associated public sector costs.

The intention to allocate funding to services for children and families facing complex and stressful life events, view their challenges holistically, and use a co-ordinated multi-agency approach must be recognised as a broadly positive step. However, I am deeply concerned by the choice of terminology in this paper. Human beings are labelled as 'troubled families', and the employment target is phrased as: *"…put adults on a path back to work. …"* (DCLG, 2015). Moreover, in a House of Commons Library briefing paper, *'The Troubled Families Programme (England)'*, author (Bate, 2016) stated that the programme aimed to *'turn around' families.* I believe that the phraseology used in these documents conflates the individuals with the challenges and situates them as passive recipients of services that will be *done to them*. In my view there is an implied blame; families' circumstances are presented as resulting from irresponsible behaviours. Bate (2016) also stated that the DCLG (Department for Communities and Local Government) claimed that 99% of targeted families were 'turned around' during Phase One (2012 -2015). In my experience, this figure appears unfeasibly high, and warrants further scrutiny. However, Bate does acknowledge criticism from other researchers and agencies; these reports are discussed in the sections which follow.

<u>Criticism of the Troubled Families agenda: Levitas (2012)</u>

In a report entitled *'There May Be 'Trouble Ahead: What We Know About Those 120,000 'Troubled' Families'*, Levitas (2012), critiques the 'misuse' of an original

report, ‘Families at Risk: Background on Families With Multiple Disadvantages’ (Social Exclusion Task Force, 2007). This was a secondary analysis report that claimed that approximately 2% of children in Britain faced five or more ‘disadvantages’, equating to approximately 140,000 families in 2004. Amongst her criticisms, Levitas (2012) questioned the accuracy of the government figure of 120,000 troubled families, claiming that this figure was based on an out-of-date (2004) estimate, which did not incorporate sampling error or sample bias. Alongside this, Levitas noted the morphing of data and descriptions of families to fit with government agenda: *“The DCLG website … makes a discursive move from families that have troubles, through families that are ‘troubled’, to families that are or cause trouble.”* (2012, p. 5). This is most concerning; allegations of misuse of inaccurate and obsolete data, as well as a disturbing coalescence of families facing a wide spectrum of challenges must surely lead us to question the claims made by this programme.

Criticism of the ‘Troubled Families’ agenda: Crossley (2015)

Crossley’s 2015 report *‘The Troubled Families Programme: The Perfect Social Policy?’* challenged government claims of a 99% success rate, a figure achieved in the midst of welfare and local authority spending cuts affecting families, councils and organisations offering services. Crossley said that these figures were *“…too good to be true…”* (2015, p. 2), and pointed out a long-established history of the ‘underclass’ narrative, from Victorian notions of ‘social residuum’, through the Eugenics Society’s identification of a ‘social problem group’ in the 1930s, and ‘problem families’ after World War Two. In more recent times, Crossley highlighted

Keith Joseph's notions of the 'cycle of poverty' in the 1970s, and New Labour's work in the 1990s and 2000s around 'socially excluded' individuals and the Respect Agenda.

The report highlighted issues with the four descriptors used to define troubled families, as well as a series of concerns about the programme. Notably, descriptor four, to *"…reduce the high costs these families place on the public sector each year…"* (DCLG, 2015) allowed local authorities, he argued, to judge which families they would work with. One might deduce that councils were able to cherry pick families with whom they were likely to achieve 'quick wins'. In 2013, it was announced that the programme would be further expanded, and in August 2014, new criteria defining troubled families were released; families now needed to meet just two out of six indicators in order to be eligible (DCLG, 2014). Crossley (2015) claimed that local authorities were given 'substantial discretion' in the interpretation of these new indicators, and that the majority of families accessing any form of non-universal service could therefore be considered 'troubled'. This is extremely worrying; a programme that claimed to work with families facing the most complex challenges appears to have conflated a broad spectrum of support needs in pursuit of its stated 99% success rate.

Crossley (2015) foregrounded ten key concerns about the Troubled Families programme. Firstly, he concurred with Levitas' (2012) critique of the methods used to calculate the figure of 120,000 troubled families, as well as her comments around the negative effects of merging families with a broad spectrum of needs to suit the

political agenda. Furthermore, the evidence base for the Family Intervention Project (FIP) model was, according to Crossley, 'weak'. Significant numbers of families saw no change in circumstances, and where positive outcomes were achieved, there was a lack of evidence around sustained change once support had ended. The belief that previous models of working had failed was, said Crossley, flawed, and the view that family issues were intergenerational simply lacked evidence to support it. He suggested that a more realistic picture was that there were issues across some families, but also many families where this was not the case. Indeed, many children from 'troubled families' did not go on to face difficulties in later life, and conversely there were children from 'stable' families who later experienced challenges.

Furthermore, and contrary to the picture of troubled families involved in crime, anti-social behaviour, substance misuse, and with children 'in need', Crossley stated that the significant majority of families participating in this programme did not fit this extreme narrative, and consequently government stated costs of £9 billion were likely to be inaccurate. Indeed the only characteristics shared by the majority of participants were as follows: *"…they are white, not in work, live in social housing and have at least one household member experiencing poor health, illness and / or a disability."* (2015, p.5).

Crossley suggested that local authorities achieved a proportion of their 99% success rate through 'data matching' in addition direct work with families. He also questioned what counted as 'turned around', families' perceptions of the changes to

their lives, and the ethically questionable practices of local authorities who, in rebadging their programmes, did not inform participating families that they had been labelled as 'troubled'. Lastly, concerned at the rapid expansion of the programme without a supporting evidence base, and recalling local authorities struggling to locate their assigned numbers of families during Phase 1, he wondered whether the new cohort of 400,000 families, identified through five different data sets from three different years actually existed.

Final reflections – the 'Troubled Families' programme

In the light of the criticisms posed by Levitas (2012) and Crossley (2015), it would seem that the public was sold a social narrative that simply isn't true. Cameron (2011) claimed that this new way of working would be 'empowering' and 'human', contrasting with initiatives of the previous Labour government, positioned as ultimately well-intentioned, yet perpetuating social positions and low aspirations. He stated that this programme would work *with* families, yet the terminology used in the project's targets and contained in impact reports positions families as passive recipients of services and programmes. There seems to be a real disparity between the stated aims of the project and what appears to be a manipulation of the data and perceptions of peoples' lives to fit with political agenda. Indeed, Crossley's doctoral thesis (2017, p.229) concluded that Troubled Families achieved little more than assisting *"…struggling families to cope with their poverty better…"*. Furthermore, in a Department for Communities and Local Government evaluation of the Troubled Families Programme, Purdon and Bryson (2016) compared the outcomes of 495 families who had engaged with the programme for approximately

9 months with 314 families who were about to or had recently engaged. The authors found that there was 'very little evidence' of significant outcome effects at 9 months.

1.5.2 'Early Intervention: The Next Steps' (2011)

'Early Intervention; The Next Steps' was an independent report led by the former Labour MP Graham Allen, and submitted in January 2011 to the then Prime Minister, David Cameron. It claimed that many of the social issues that the UK faced (culminating in the greatest costs to the public purse as well as entrenched and complex social challenges) were the result of ineffective support to young children and their families in the early years. This period, Allen claimed, was particularly critical in relation early brain development, with the young infant having achieved 25% of brain development at birth, and 80% by the age of 3. Negative parenting experiences in this phase of life would therefore have a significant effect on how the child was *"…emotionally 'wired'…"* as well as influencing reactions to future life experiences and *"…their ability to empathise with other people."* (2011, p. xiii).

The central principle underpinning this report (and referred to repeatedly throughout the text) was that effective early support programmes should *"…provide a social and emotional bedrock for the current and future generations of babies, children and young people…"* (2011, p.v) through offering support before issues arose. This, Allen claimed, would move away from practices where intervention was too late, too costly and 'ineffective'. Furthermore, Allen recommended that fifteen 'Early

Intervention Places' (EIPs) should be established; local authorities and voluntary sector organisations who understood the needs of families in the locality and could offer the very best and 'rigorously proven' programmes. Additionally, there should be an 'Early Intervention Foundation'; an independently funded organisation responsible for evidencing the programmes offered through the EIPs, supporting and actively expanding their work, and securing ongoing finances from organisations and businesses to fund 'Early Intervention'.

Lastly, Allen recommended that the Government should extend policies to ensure that all children possessed the *"…social and emotional capability to be 'school ready' at five…"* (2011, p.vi). This would be achieved through initiatives such as the Family Nurse Partnership, cross-party working around improved paternity and maternity support, a national focus on parenting, and excellent early years education for 0 – 5s. Highlighted amongst these was a stated need for increasingly effective assessments to identify and address social and emotional issues before they became 'intractable'.

The Allen Report (2011) also developed a list of seventy-two early support programmes which were rated from Level 1 (highest) to Level 3 (lowest) according to the quality of their supporting evidence. Programmes were assessed against four key aspects; evaluation rigour, impact evidence, programme focus, and 'system readiness'. At the time of the report, a strong focus was placed on randomised controlled trial and quasi-experimental designs as benchmarks of evaluation rigour. However, it would now appear that this stance has softened slightly. The Early

Intervention Foundation was established in 2013 (Early Intervention Foundation, 2017a), and its online Evidence Standards now state: *"High-quality evaluations do not need to be randomised control trials if a relevant and robust counter-factual can be provided in other ways."* (Early Intervention Foundation, 2017b). The guidance states that the evaluations must show positive effects for participants over at least 1 year, although what counts as 'relevant counter-factual' appears unclear.

I agree with the broad aims of this review; that it is critical that high quality preventative work begins with families at the very earliest stages in order that the *"…social and emotional 'bedrock…"* (Allen, 2011, p.v) is developed to support current and future generations of our youngest citizens. In my view, this relates to children living in families where there is emotional warmth and responsiveness, and consequently secure attachment relationships. Attachment security has been connected with mental health resilience (Dowling, 2005; Bowlby, 2007) and also is thought to be foundational to the child's capacity to be an 'effective learner (Pascal and Bertram, 1996; 1998; 2009; 2013). I believe that infant massage is a key service supporting the philosophy of early support, offering critical scaffolding for early infant-carer connectivity (Chapter 7, Sections 7.3 and 7.5). However, I have concerns that despite Allen's claims that families facing challenge are recognised as doing all that they can to provide secure and loving home environments, they are still viewed by those in authority as passive recipients of services. For example, the rationale for proposed assessments focusing on social and emotional developmental of children from birth to 5 years was *"…so that they can be put on the path to 'school readiness' which many – not least from low-income households would benefit from."* (2011, p. xix) There is a suggestion here that young children do

not come into the world with enquiring minds and that families with lower incomes may not support their children's learning. I would contradict this; my view is that children come into the world primed for interaction (Stern, 1977; Murray, 1991; Trevarthen, 1998; Trevarthen, 2011) and learning (Gopnik, Meltzoff and Kuhl, 2001a), seen in babies' engagements with the infant massage sessions in this study (Chapter 7). Moreover, practitioners' accounts of an almost universal drive amongst parents to participate in infant massage programmes (Chapter 6) indicates families' aspirations for their children's learning and development.

1.5.3 Early Intervention Grant (EIG) and the Evaluation of Children's Centres in England (ECCE) study

In this section, I will briefly discuss some of the policies and initiatives introduced in recent years in relation to children's centre funding, outcomes monitoring, and the focus of their work. This, I believe, provides the reader with important contextual information in relation to the challenges faced by the participating children's centre sites (introduced in Chapter 4, Section 4.2.4).

Sure Start children's centres were the initiative of the 1997 – 2010 Labour government, with the intention of offering a universal provision of health services, focused group activities, quality early learning and funded daycare to all under-fives and their families. The aim of this service was to support and promote the development and learning of young children (Gaywood and Pascal, 2016). In the initial phases of rollout, centres were located in areas identified as 'deprived', and services directed towards families identified as 'vulnerable' (Anning and Ball, 2008;

Gaywood and Pascal, 2016). There was a strong focus on the early identification of challenges (Gaywood and Pascal, 2016) which drew on international research around the positive effects of early help in relation to children's health, wellbeing and learning outcomes (Anning and Ball, 2008). The earlier stages (Phases 1 and 2) of programme rollout in the *"…30% most disadvantaged areas…"* (Department for Children, Schools and Families, 2007, p.4) were followed by a third phase of centres, located in areas where the need was seen to be less, and services offered therefore less intensive (DCSF, 2007). This would create a universal network of integrated children's centre provision, with a target of 3,500 centres to be in place by 2010 (HM Treasury, 2005). However, with a change of government in 2010, and a Conservative-Liberal coalition in place, funding arrangements and scrutiny of the early years sector began to change.

The Early Intervention Grant

The Early Intervention Grant (EIG) was introduced in a written statement to Parliament in December 2010 by former Secretary of State for Education Michael Gove MP. The EIG would replace a number of previous grants, and, due to reductions in government spending, funding available would also be 10.9% lower in 2011-12 than the combined total for 2010-11. In contrast with Sure Start funding, which had been ring-fenced (Bate and Foster, 2017), EIG was not protected. Gove (2010) claimed this would allow local authorities greater freedom in the prioritisation and allocation of funding streams, to work more strategically, and to focus on early intervention. He also stated that within the EIG allocation there would be sufficient

funds to ‘maintain’ the system of children’s centres, and to sustain universal access whilst also targeting the families ‘in greatest need’.

Whilst I agree wholeheartedly with the notion of the continued offer of universal and focused services, which recognise families as unique, the suggestion that the EIG would ‘maintain’ children’s centres does not indicate a deep commitment to this as a model for early support. Indeed, Bate and Foster (2017) highlighted a 43% reduction in local authority outturn (actual) spending between 2010-11 and 2015-16, equating to a 47% reduction in real terms. Indications were that 2016-17 budgets would sustain further cuts. We must question the effects of such substantial funding reductions on centres’ capacity to work effectively with local families.

The Evaluation of Children’s Centres in England (ECCE) project

The Evaluation of Children’s Centres in England (ECCE) project was a six year project commissioned by the Department for Education, and carried out between 2009 and 2015 by researchers from NatCen Social Research, the University of Oxford, and Frontier Economics. The study was based around a number of connected ‘strands’ of exploration, with the overarching aim of building a detailed understanding of the effects of children’s centre services for children and families, as well as financial analyses of the associated costs (Evangelou *et al.*, 2014).

The research team's examination of parenting services offered by children's centres found that across 2012 and 2013 infant massage was amongst the top five 'additional programmes' used. These were programmes known to the research team but not included in Allen's (2011) list of evidence-based programmes (Section 1.5.2). Indeed, in 2013, eighty-one of 113 (71.6%) centres participating in a self-completion questionnaire reported that they offered this service to families (Sylva, Hall and Goff, 2014). The team (Sylva, Goff and Hall, 2015) also identified a correlation between higher numbers of 'well-evidenced' programmes, positive Ofsted ratings of centre effectiveness, and a sharper focus on supporting enhanced parenting. However, it was also noted that the evidence-based programmes engaged with smaller numbers of families per year than the 'additional programmes'. Examples given were twenty-two families for Incredible Years and twenty-three for Triple P compared with forty-seven families for Baby Massage.

It would seem that children's centres were faced with difficult choices; positive Ofsted ratings appeared connected to the provision of evidence-based programmes, yet services such as infant massage were linked to greater engagement with families. Indeed, practitioners participating in this study described their infant massage service as one that the majority of parents were keen to engage with; an important means of developing attached working partnerships with families, and critical to supporting early dyadic interactions (Chapters 6 and 7).

Sylva, Goff and Hall (2015) also examined practitioner adherence to the programmes offered, stating that this was 'known' to lead to better outcomes for

families. Looking specifically at researcher ratings for infant massage in Table ApD2.6, Appendix D2 (Sylva *et al.*, 2015, p.100), whilst scores for 'Manual Use' were 'good', ratings for 'Feedback and Evaluation' and 'Ensuring Fidelity to the Programme' were 'satisfactory' and 'inadequate' respectively. In my opinion, this suggests: 1. Infant massage practitioners faced difficulties around documenting the complex effects of infant massage. 2. Practitioners adapted programmes to meet the needs of the families in their reach areas. It is anticipated that this study's findings will be used to develop evaluation tools to support more effective documentation of the effects of infant massage (Chapter 8). Furthermore, whilst I appreciate the researchers' views around programme adherence and outcomes, and believe that the central principles and practices of infant massage should be adhered to carefully, I am also of the opinion that we need to look for more individualised ways to offer the service to families who find the traditional group format a barrier to engagement. This is explored further in Chapters 5, 6 and 7.

Overall, the ECCE study found that children's centres had small but positive effects for families, and slightly less so for children and mothers, with 'family functioning' and parenting highlighted in particular. The research team surmised that children's centres were focused on engaging with 'high need families', a key element of the core purpose (Sammons *et al*., 2015). Indeed, 'vulnerable families' (defined in the ECCE study as families facing financial challenge) tended to access services more sporadically when their children were very young, yet subsequently accessed more services and for longer than other families. The research team attributed these to the effectiveness of children's centre targeting (Smees and Sammons, 2015). I

would add that this also highlights the abilities of children's centre teams to build trusting attached relationships with local families.

I believe there is strong argument for the return of a universal infant massage provision for *all*. This service supports trusting and attached working relationships with families, offers critical support during the early stages of the infant-carer relationship, and can allow important early triaging opportunities to ensure that families experiencing difficulties are identified and appropriately supported. In short, it is the opposite of a 'nice to have luxury'; it is a needed service, one that resonates deeply with the core principles of 'Early Intervention'.

1.6 Summary and critical reflections

Chapter 1 has situated this doctoral study in a social, political and economic context; one that has impacted the children's centres that participated in this project. It has also made transparent the relevant aspects of my personal and professional background, leading to the development of the research project, and its strengths, limitations and boundaries. In recent years we have faced significant challenges, with 'austerity measure' cuts made to local authority budgets, new funding approaches to early years services, and social divisions fuelled by government agendas such as 'Troubled Families' and the 2016 'Brexit' vote. We live in highly challenging times; the need to work with others with compassion and warmth has never been greater.

Chapter 2 - Literature review

2.1 Introduction

Moving forward from the contextual backdrop provided by Chapter 1, this chapter will critically examine the literature relevant to the study focus. Firstly, the identification of the five key concepts underpinning the study will be discussed. This will be followed by a clear articulation of the methodological approach and parameters of the literature searches undertaken. The review will scrutinise both empirical and conceptual literature linked to the five key concepts, carefully assessing the themes and strengths, and identifying the gaps. Lastly, my doctoral study will be located in relation to the literature examined.

2.2 Identification of the five key concepts

Using an early draft of the research title (below) as a starting point, and through discussion with my supervisors and peers, the key concepts for the literature review were identified.

"What are the benefits of infant massage for more vulnerable children and their carers and how might the service be more effectively delivered in a children's centre context?" (Appendix 1, p.3)

As discussed in Chapter 1, Section 1.3.3, the main research question and sub-questions needed to inform and drive the literature searches, as well as the research design and selected methods. The first concept identified was *infant*

massage, and secondly a key feature of the practice, the concept of *touch*. It was also important to examine one of the central benefits claimed for the practice, the influence on infant-carer *attachment*, as well as the related concept of *intersubjectivity*. Lastly, the theme of *resilience* was identified; an important concept given that the study aimed to explore the protective factors around families who faced challenging circumstances.

2.3 Literature search key words, criteria and methods

The literature search was completed in two main phases; in the early stages of the project, broad concept analyses of intersubjectivity and attachment were completed with the aim of developing a deep understanding of two critical aspects of the study. Date restrictions were not included at this stage as one of the aims was to develop an understanding of the origins of the concepts. However, sources were only included if they were peer-reviewed or recommended by experienced early years colleagues. The second phase took a more tightly defined approach, splitting the search into five segments and adhering closely to 'The CREC Approach to Literature Review' (Pascal and Bertram, 2015a). This is a process with five main stages, namely a clear and boundaried research focus, the careful location and selection of literature sources, summarising and examining the evidence strengths, and evaluation and reporting. This approach also recommends the use of 'best evidence' (for example peer-reviewed journal articles), the consistent and thorough documentation of search decisions and synopses, and clearly-defined questions and processes. Below is a table summarising the search parameters, key words and synonyms used:

Table 1 – Literature search strategy

Databases

SLC = Summon Library Catalogue Ci = CINAHL Plus with full text

PBSC = Psychology and Behavioral Science Collection BL = British Library

ERC = Education Research Collection

All searches below were: advanced, for scholarly and peer-reviewed materials in English, over a 5 year date range. Open searches were completed for key authors recommended by supervisors and colleagues.

Concept	Keywords and / or author name	Database	No. of results reviewed
Infant massage	Baby massage OR infant massage NOT Community Practitioner	SLC	30
	Baby massage OR infant massage	Ci	10
	Baby massage OR infant massage	ERC	1 result
	Baby massage OR infant massage	PBSC	3 results
	Baby massage OR infant massage	BL	4 results
Touch	Touch AND babies OR infants OR children NOT community practitioner	SLC	30
	Touch AND babies OR infants OR newborns OR children	ERC	10
	Touch AND babies OR infants OR newborns OR children	PBSC	10
Intersub-jectivity	Intersubjectivity AND babies OR infants OR newborns AND children	SLC	20
	Intersubjectivity AND babies OR infants OR newborns AND children	PBSC	7 results
	Intersubjectivity AND babies OR infants OR newborns AND children	ERC	10
Attachment	Attachment AND babies OR infants OR newborns AND children	SLC	20
	Attachment AND babies OR infants OR newborns AND children	PBSC	10
	Attachment AND babies OR infants OR newborns AND children	Ci	10
Resilience	Resilience AND babies OR infants OR newborns AND children	SLC	30
	Resilience AND babies OR infants OR newborns AND children	ERC	10
	Resilience AND babies OR infants OR newborns AND children	PBSC	10

Having identified the literature, I designed a framework for the systematic scrutiny and summary of the selected sources. Using a combination of headings suggested by Pascal and Bertram (2015a) and those recommended by Foss and Waters (2007), I constructed a detailed framework (Appendix 3) supporting the synthesis and interpretation of the selected texts. Having completed the framework, each source was assigned a rating. Pascal and Bertram (2015a) suggest a four tier grading system from A to D, with A denoting a source that is 'thick and rich' and D a source that has no use. I found the tiers to be too broad, and so amended this by introducing 'plus' and 'minus' options: A-, B-/C+ and so on. Texts rated C- and below were then excluded from the review, and those rated C and above included.

2.4 Empirical and conceptual literature reviews

2.4.1 Infant massage

Definition and context

The first concept to be explored in this literature review is infant massage, also known as baby massage. Infant massage, described as the *"…systematic tactile stimulation by human hands. …"* (Bennett, Underdown and Barlow, 2013, p.5) is a key feature of childcare across the world, and particularly in Africa and Asia (Field, 1994). Furthermore, maintaining close physical proximity through the use of slings or carriers is a common practice in Nigeria, Uganda, Bali and New Guinea (Auckett, 1989). It is an ancient practice; detailed records of massage processes used in Chinese medicine date back to 2760 BC (DeDominico and Wood, 1997). Indeed,

midwives perform a type of massage with newborn infants, aiming to prompt the first breath (Cooke, 2015).

Infant massage was introduced to western countries by practitioners including Amelia Auckett and Vimala McClure, who both spent periods of time in India. Infant massage programmes offered in western countries today incorporate both Indian and Swedish massage techniques (Underdown and Shai, 2014). However, there is no standardisation of the infant massage routine or national regulation of massage facilitators (Cooke, 2015) and amongst the range of programmes available, a noticeable variation in techniques and emphasis (Underdown and Barlow, 2011; Bennett, Underdown and Barlow, 2013).

Within the literature search, I scrutinized the practitioner guides used at Site 1, ('The International Association of Infant Massage: Manual for Infant Massage Instructors' [McClure and the IAIM Circle of Trainers, 2005]) and Site 2 ('Massage for Babies: How to Teach Baby Massage Course Handouts' [Cranfield, 2011]). My view was that both guides offered plentiful detail around group facilitation, massage techniques and the claimed benefits for infant massage, and the authors had clearly completed a significant amount of research in their preparation. However, whilst McClure and the IAIM Circle of Trainers' (2005) guide was the more robustly written of the two, the referencing techniques used in both manuals were inconsistent and at times unclear. Furthermore, Cranfield's (2011) guide appeared to be written informally, and contained a number of typographical errors. Based on these observations, I would suggest that there may be a call for programmes and

supporting materials to be reviewed with a view to enhancing academic rigour and trustworthiness.

Key researchers

Tiffany Field and her collaborators have made a significant contribution to the body of knowledge associated with infant massage. In a recent review of massage research (2016), Field claimed that massage had demonstrated positive effects with regard to prenatal depression, for premature and full-term infants, and in relation to autism, pain management, immune conditions and issues associated with ageing. Furthermore, Field (2014) claimed that moderate as opposed to light pressure massage was key to ensuring positive effects, such as weight gain in preterm infants. Moderate pressure massage was found to enhance vagal activity and gastric motility, which was thought to lead to improved food absorption and consequently weight gain (Diego *et al*., 2007; Diego, Field, Hernandez-Reif, 2014).

Furthermore, a study exploring the effects of massage on preterm infants' heart rate responses to the removal of a lead whilst in the NICU (neonatal intensive care unit) found that infants who had moderate pressure massage had lower heart rate increases and returned to the baseline rate more quickly than those in the light pressure or no treatment groups (Diego, Field, Hernandez-Reif, 2009). The research team concluded that this indicated a reduced pain response and quicker recovery amongst the moderate massage group.

Other research has explored the connections between sleep and massage with and without lotion (Field *et al.*, 2016), finding that massage with lotion was associated with a shorter transition to sleep and longer sleep for mothers, and reduced night-time waking and longer sleep for infants. Field *et al.*, 2016 suggested this could be linked to the lotion group massaging more frequently due to finding a lotion massage more comfortable, and pointed to their earlier study (Field *et al.*, 1996) where the use of oil was thought to act as a lubricant, reducing friction and allowing movements to be more fluid and rhythmic.

Field has also participated in research focusing on the effects of massage on maternal depression and anxiety (Feijo *et al.*, 2006) amongst two groups of mothers and infants. The first group carried out massage with their infants, and the second observed a researcher massaging their infants. The findings were interesting; depression scores were reduced in both groups, indicating that observing and performing massage reduced depressive symptoms. However, anxiety levels were reduced amongst the massaging mothers only, which the team interpreted as either connected to the process of massaging the infants, or a reduced sense of helplessness, an aspect of NICU-related parental stress identified by Franck *et al.* (2005) and of relevance to this doctoral study. O'Higgins (2007) also connected the practice of massage to reduced maternal depression, both at the end of a series of classes, and 12 months later. Mothers who participated in massage groups had greater improvements in depression scores than mothers who had participated in support group sessions only.

Ethical considerations

However, we must also consider the ethics associated with Feijo *et al.*'s (2006) research; I question the allocation of mothers with symptoms of anxiety and depression to an observation group at a time when there may already be disruption of touch and interaction due to infant hospitalisation. Furthermore, whilst the observation group appeared to benefit in terms of reduced depression, my view is that an important attachment opportunity may well have been missed. Indeed, it is a concern of this doctoral study that whilst researchers such as Field have contributed important new knowledge to the field of infant massage research, there appears to be a strong tilt towards the use of experimental research and randomized controlled trials (RCTs). When we are examining the concepts of infant massage, touch and attachment, and working with very young children and families, I am questioning whether it is ethical to exclude them from experiences that we believe are likely to be beneficial in order to obtain a comparison?

Infant massage – the benefits for preterm infants

A substantial portion of the literature located in this review has focused on the effects of infant massage for premature babies in NICUs. For infants born early and with less developed systems than full-term babies, there can be issues around feeding, growth and development, attachment with caregivers, as well as painful procedures associated with routine care. Kadir *et al.* (2014) explored the effects of abdominal massage on feeding tolerance across a 5 day period amongst tube fed preterm infants in a Turkish NICU. The researchers found that bowel movement frequency was not significantly affected, but weight gain, vomiting, abdominal

circumference, and gastric residual volume excess improved. Recommendations were that this approach should be used to prohibit gastric residual volume excess and abdominal distension. Similarly, a Korean study examining the effects of enteral (tube) feeding massage, an adapted massage sequence targeting the infant's trunk area, found that the technique supported the earlier introduction of full enteral feeding, improved blood flow between the aorta and gastrointestinal tract (superior mesentery artery functioning), weight gain and growth (Kim and Bang, 2017).

Choi *et al.* (2016) studied the effects of massage on the growth and gastrointestinal function of premature infants across a 14 day period. They saw increased growth, and improved gastrointestinal functioning amongst the infants who participated in massage, and in contrast with a control group. Enhanced gastrointestinal functioning included a marked increase in bowel movements, which is at odds with the findings of Kadir *et al.'s* (2014) study. Interestingly, Choi *et al.* (2016) also foregrounded the premature infant's experience in the NICU where segregation from carers is routine, and where 'positive' touch is lacking. Touch is explored in more depth in Section 2.4.2.

Infant massage has been compared with other forms of care with respect to weight gain in premature infants. Rangey and Sheth (2014) investigated the effects of infant massage and kangaroo mother care, an approach incorporating early and ongoing skin-to-skin care and breastfeeding attributed to Colombian paediatricians Rey and Martinez (Bailey, 2012). The research found that both approaches were

connected to enhanced weight gain and reduced time spent in hospital. With regard to massage therapy and weight gain, the researchers suggested the theory proposed by Diego, Field and Hernandez-Reif (2005); that moderate pressure massage enhanced vagal activity, connecting to an increased release of digestive hormones and improved gastric motility (digestive system movement and transport of contents).

Rangey and Sheth (2014) also suggested that massage therapy may reduce infant stress responses to the NICU environment, supporting health and reducing hospital stays. Furthermore, massage may also extend the 'non-stressed state' of the autonomic nervous system, protecting the infant from the stresses of the environment and leading to increased vagal activity and weight gain. Diego, Field and Hernandez-Reif (2014) compared the effects of moderate pressure massage and infant exercise (bending and extension of limbs) on premature infant weight gain. They found that both approaches led to enhanced weight gain, but through different systems; exercise was linked to greater calorie intake, and massage associated with enhanced vagal activity.

Other research has scrutinised the use of oils in infant massage; Mahnaz *et al.* (2016) assessed the effects of massage with olive oil amongst a group of preterm infants, and found that weight gain averaged 21 grammes compared with 7 grammes for infants massaged without oil. There is also debate in the research around the safety of oils used on young infant skin. Li, Zhong and Tang (2016) claimed that oil massage may support infant growth, with oils posing a 'limited risk'

of adverse skin responses. However, Cooke *et al.* (2016) stated that although topical oils may support skin hydration, there were also changes in the structure of the skin barrier, and the clinical significance of this was unknown.

During the infant's stay in the NICU, there may be care procedures which cause pain and discomfort, such as tube insertions and injections. Chik, Ip and Choi (2017) examined the effects of upper limb massage on pain relief amongst infants needing venipuncture (the puncture of a vein, usually to take a blood sample or for intravenous injection) and born at 30 to 40 weeks). Findings were that infants who had massage before venipuncture experienced significantly less pain than those in the control group. Infant massage has also been assessed in relation to its effects on autonomic nervous system (ANS) function in preterm infants, measured through heart rate variability (HRV). Smith *et al.* (2013) claim that preterm infants are regularly exposed to stress during hospitalisation, and according to Cohen *et al.*, (2008) also have enhanced levels of cardiac reactivity which could lead to later health problems. Smith *et al.* (2013) found that a 4 week period of massage therapy provided by licensed massage therapists was connected to improvements in HRV, particularly amongst male infants. This was of particular interest to the team as a previous study (Elsmen, Hansen Pupp and Hellstrom-Westas, 2004) had identified health issues amongst male infants thought to be connected to higher morbidity and mortality rates.

However, a study assessing the neurological effects of parent-provided massage amongst very preterm infants at term equivalent age (Lai *et al.*, 2016) concluded

that massage did not appear to lead to improvements. Nevertheless, mothers who massaged reported reduced levels of stress in comparison with control counterparts. The researchers suggested that reduced maternal stress may support attachment and postnatal wellbeing.

Wellbeing of carers of preterm infants

Researchers have also focused on the wellbeing of parents of hospitalised infants. Afand *et al.* (2016) studied the effects of infant massage on mothers of premature infants around the time of discharge from an Iranian NICU, and found that maternal anxiety was reduced amongst participants. The researchers suggested a more widespread use of massage as it had the potential to support health and wellbeing, reduce the likelihood of postnatal mental health issues, and enhance infant-carer relationships. Similarly, Shogi, Sohrabi and Rasouli (2017) observed the influence of massage on maternal attachment behaviours towards hospitalised infants. They found that the massage and control groups both demonstrated increased attachment behaviours at post-intervention, although the mean attachment rating for the massage group was significantly higher than the control group. The authors concluded that infant massage could be an important channel supporting and hastening the infant-carer attachment.

However, in a doctoral study exploring the cultures and contexts in Lebanese NICUs where infant massage is not currently part of medical practice, Abdallah (2018) found that parents were anxious, spent little time in the unit aside from

breastfeeding, and lacked agency. This was interpreted by the author as ‘missing the opportunity’ to engage families in the NICU, and could lead to difficulties after discharge.

It would appear that infant massage is a highly stimulating experience which may be beneficial to preterm infants, particularly in terms of weight gain, stress and pain management, and attachment. Indeed, a systematic review (Alvarez *et al.*, 2017) drew similar conclusions, adding that massage therapy also supported neurodevelopment. However, it is also important to consider that massage provided by therapists and NICU staff described in some studies could interrupt an already delicate infant-carer attachment process. It is positive, therefore, to see research promoting the significance of carer-provided massage (Afand *et al.,*2016; Shogi, Sohrabi and Rasouli 2017).

Infant massage - infant illnesses

The effects of infant massage on other aspects of infant health have also been explored. One study compared baby-CIMT (constraint-induced movement therapy) with infant massage in relation to improving the manual abilities of children aged 3 to 8 months with unilateral cerebral palsy (Eliasson *et al.*, 2018). The results showed that baby-CIMT group participants had greater improvements in both hand movement and parental sense of competence. However, the baby-CIMT group were supported and trained in the home through weekly occupational therapist visits, whereas the baby massage group families received individualised tuition prior

to carrying out massage independently. This calls into question the efficacy and significance of support needed to enact new learning. Additionally, parents were not informed of the researchers' hypothesis that baby-CIMT would be the most effective approach prior to participating in the study. In my view, we should be transparent in *all* aspects of our research.

Other studies have analysed the effects of infant massage on infant jaundice, bilirubin levels, and bowel movements. According to the Black's Medical Dictionary (2010), bilirubin is the main pigment in human bile and is excreted in the faeces and urine. Deposits of bilirubin in the skin and mucous membrane can lead to jaundice, and where levels are particularly high there is a risk of brain damage (kernicterus) (Eghbalian, Rafienezhad and Farmal, 2017). Two studies focusing on the effects of infant massage on transcutaneous (across skin) bilirubin levels, bowel movement frequency and jaundice (Seyyedrasooli *et al.*, 2014; Eghbalian, Rafienezhad and Farmal, 2017) found that bowel movements increased amongst massaged infants compared with a control group. However, Seyyedrasooli *et al*.'s (2014) study also found that skin biluribin levels were not affected by massage, contrasting with previous research. It was suggested that the 4 day period over which the study was conducted may be a contributing factor, and that future research assessed the effects of massage on bilirubin levels over longer timeframes. Indeed, Eghbalian, Rafienezhad and Farmal's (2017) study indicated that the connection between defecation frequency and bilirubin levels was gradual, with no significant relationship between the two until the third and fourth days of their 4 day study.

Infant massage – families facing complex challenges

Infant massage has also been used in studies with women who have used drugs during pregnancy (Hahn *et al.*, 2016) and where women are engaged in recovery programmes (Porter *et al.*, 2015). Hahn *et al.* (2016) undertook a qualitative study with thirteen infant-mother dyads with the aim of developing an enhanced understanding of how infant massage may influence infant-carer relationships and infant behaviours. Three central themes emerged, namely 'empowerment', 'enjoyment and bonding', and 'calm and comfort'. From this, the researchers surmised that infant massage may assuage withdrawal symptoms amongst the babies, as well as supporting the infant-carer attachment.

By contrast, the randomized three-group controlled trial conducted by Porter *et al.* (2015) found that parenting stress and depressive symptoms were reduced amongst women who participated in a blended infant massage-parenting enhancement programme (IMPEP) but self-esteem, attachment and interaction scores were not significantly affected. However, the researchers highlighted that mothers participating in the study had high self-esteem scores at baseline, the study timeframe was limited, and peer and agency support through residential centres during recovery may support attachment and interaction. The notion of informal peer support is of particular relevance to this study, which recognises and considers the significance of the infant massage environment (Chapter 6, Section 6.5.2).

A piece of research which is of particular interest to this doctoral project is Underdown, Norwood and Barlow's mixed-methods study (2013) of the effects of infant massage amongst thirty-nine infant-carer dyads described as 'low', 'medium' or 'high' risk according to their correlation with six identified context factors thought to be markers of risk. The research aimed to uncover context factors and programme features (mechanisms) that were connected to the outcome (CMO) variances amongst the dyads, and located three CMO patterns. Overall, the women rated as 'low risk' demonstrated no changes in interaction and slight changes in depression regardless of programme quality. Women rated as 'moderate risk' were able to achieve positive change when supported by a programme classified as 'good'. Lastly, women rated as 'high risk' did not appear to benefit from the programmes regardless of the quality rating, and some mothers' behaviours moved from 'unresponsive' to 'intrusive'.

Whilst this is an interesting set of findings, I am troubled by the language used in relation to perceived risk and behaviours. I question how these findings and risk ratings could be shared with participants in ways that would support positive growth. However, the researchers do make salient points around the critical nature of programme quality, as well as the efficacy of programmes where families face a more complex set of challenges. Rather than claim that programmes do not work when families face particularly demanding issues, I would put forward the view that group environments are not always suitable. In these instances, individual or very small group support may be more appropriate, and this is explored further in Chapter 6, Section 6.4.2 where Family B's experiences are examined.

Infant massage and adjusting to parenthood

Other studies have taken the perspective that parenthood involves a process of adjustment. Gnazzo *et al.* (2015) described it as a 'transition' and used a qualitative single case study to analyse the effects of infant massage for both carers in a family. In my view, this study upends traditional notions of 'vulnerability'; the family was economically stable and both parents were graduates, but had experienced conception difficulties as well as the risk of a premature birth. Both reported 'strong concern' about caring for their child. Following infant massage tutoring, both carers had reduced depression, and improved views of the stresses associated with parenthood.

Vicente, Verissimo and Diniz (2017) viewed the first 12 months of motherhood as *"…a period of growth and adaptation…"* (p.114) and found that mothers who participated in infant massage were better adjusted to parenthood, more confident in their capabilities, and benefited from a greater level of support from partners and mothers than the women in the control group. The authors surmised that infant massage played an important role in supporting the dyadic relationship, as well as providing the mother with support that enhanced confidence and positive engagement with the child. Furthermore, mothers who participated in massage had more positive dispositions towards parenthood, and more actively engaged their partners in the care of the baby. Indeed, in an exploratory article Celebi (2013) suggested that parental anxiety was relatively usual, particularly in the very early stages after the birth of a child. Infant massage was put forward as a technique that could support a 'positive feedback loop' where the carer's responsiveness soothes

the infant, thus enhancing parental confidence for future interactions. Additionally, and critical to this study, Celebi (2013) claimed that infant massage offers parents the opportunity to observe their baby, when, according to Underdown and Barlow (2012) their drive to communicate, and skills in activating and terminating the dialogue are evident.

Looking across the literature, it would appear that some reviewers express concerns relating to the methodological quality of research focusing on the effects of infant massage (Bennett, Underdown and Barlow, 2013; Juneau, Aita and Heon, 2015), and there are some contrasting views around the neurological benefits (Lai *et al*., 2016; Alvarez *et al.*, 2017). However, in my view there are compelling findings to suggest that the practice supports weight gain, digestion, stress management and pain reduction, particularly amongst preterm and unwell infants. Furthermore, parental depression and anxiety, attachment behaviours and adjustment appear to be positively affected. The use of RCTs has been widespread amongst the located literature, which I find ethically problematic. It was critical to this doctoral study that the methodological selections provided positive experiences for the participants, and at the same time supported the deeper understanding of the experience of infant massage. The methodological choices are considered further in Chapter 3.

2.4.2 Touch

Definition and focus of the literature

Touch is an important concept in this study; it is both a significant aspect of infant massage, and the earliest sense to develop, with human embryos demonstrating touch responses at less than 6 weeks (Montagu, 1986). The literature located appears to focus around four significant areas; the function of touch for premature babies in the NICU, its role in regulation and adaptation, touch sensitivity, and communication and learning.

Touch in the NICU

Studies examining the use of touch in the NICU have particular utility to this study as they focus very specifically on the benefits for these young babies at a pivotal time. Reynolds *et al.* (2013) explored the influence of parental presence and holding in the NICU on infant neurobehaviour at term equivalent, and found that infants who had been visited and held more frequently had more developed and fluent motor skills, and were more relaxed and emotionally predictable. The authors stated that these practices could provide support to early attachment and neurobehaviour. It would seem that the presence and touch of our family members plays a key role in our development and regulatory behaviours. Indeed, in a review of the research focusing on the use of touch and massage to reduce infant stress in the NICU, Law Harrison (2001) claimed that very gentle and still touch may have soothing effects on babies at this most delicate stage, thereby reducing motor activity and distress.

Welch *et al.* (2015) researched the effects of the programme Family Nurture Intervention (FNI) which was designed to reduce the negative effects of separation of infants and carers in the NICU. FNI methods included the exchange of cloths previously held next to the infant and carer's skin, and the use of touch, eye contact, and first language maternal speech with an emotional content. The results pointed to strong gains across neurodevelopment, social connection and attention. Furthermore, and of particular relevance to this doctoral study, the research team stated that the results indicated that programmes supporting emotional exchanges between dyads in the NICU could be critical to improving developmental pathways for preterm infants. This could suggest an important role for the practice of infant massage, which also focuses on multi-modal interaction and a strong emotional content.

Other researchers have examined the combined use of music and touch in relation to infant pain reduction in the NICU (Qiu *et al.*, 2017). According to the team, preterm infants experience painful procedures through NICU standard care. Their research with preterm babies in the NICU of a Chinese university hospital found that the babies who experienced combined music and touch intervention (CMT) had higher beta-endorphin concentrations in their blood. Through repeated sessions of CMT, concentrations could be sufficient to reduce infants' pain responses during procedures. Other examinations of interaction in the NICU have highlighted what seems to be parents' instinctive drive to use touch to comfort their fragile infants. A naturalistic study involving American Indian women in North Carolina noted that there were high levels of maternal touch and infant vocalisation amongst dyads during a period of serious illness (Brooks, Holditch-Davis and Landerman, 2013).

Taken together, these studies would suggest the significance of touch, music and interaction in soothing young infants during a critical time in the NICU, and would point to important implications for infant massage practice.

Touch and regulation

Other studies with full term infants have aimed to understand the part played by maternal touch in emotional regulation (Jean, Stack and Arnold, 2014), and have found that maternal playful touch supports both joint attention and shared interaction. Furthermore, the team boldly claim: *"Results imply that through touch alone, mothers are able to regulate the changes in their infants' affect."* (p.570).This indicates that touch is a powerful channel of communication. Feeding as a form of touch and interaction has also been suggested as beneficial for infant and carer. It is thought to function as a visual, tactile and olfactory stimulant to areas of the brain responsible for attachment in the infant and carer (Finistrella and Lavis, 2014). Moreover, amongst mothers of infants with congenital anomalies in a Turkish NICU, the ability to breastfeed and touch their babies was connected to a more effective transition to parenthood (Korukcu, Deloiktas and Kukulu, 2017).

Touch sensitivity

Infant sensitivity to touch has been connected to sleep quality (De Marcas *et al.*, 2015) and seen as a possible indicator of special developmental needs (Mammen *et al.*, 2015). In the first study, infant responses to sound, light and touch were examined at 3 and 6 months; infants displaying both low and high reactivity were

thought to be ‘at risk’ of compromised sleep quality. The second study focused on refining understanding of the links between infant responses to touch stimulation and autism, and highlighted avoidant behaviour as the main indicator of autism. From this, the researchers suggested that infant touch avoidance had the potential to restrict the emotional and social content of the interaction with the parent, such as touch to establish eye contact, love or reassurance, and hence to negatively affect the development of higher order skills. Other research identified that tickle stimulation in conjunction with maternal smiles and vocalisations generated a positive response amongst babies aged 9 to 11 months (Ikeda and Itakura, 2013). The researchers concluded that infant touch responses were supported by maternal communication; this suggests to me a moderating quality in caregiver interaction, which could reassure the infant as they experienced new sensations such as massage.

Touch and communication and learning

Touch is viewed as the earliest means of social communication (Montagu, 1986; Botero, 2016), and when partnered with the sense of smell, may support mutuality in dyadic interaction (Hugill, 2015). Researchers have observed the instinctive use of touch amongst parents with hearing loss to augment interaction with their infants, both with and without hearing loss (Paradis and Koester, 2015). The research team also claimed that touch generates a greater number of opportunities for joint attention (the inclusion of objects in the dyadic dialogue and an important means through which the infant learns about the world, outlined in Section 2.4.3), which in turn enhances interactions and social, emotional, linguistic and developmental

progress. Indeed, Botero (2016) claims that the role of touch and other channels of communication as facilitators of joint attention have been overlooked, as since the 1970s, researchers have understood joint attention to be activated through visual means.

The senses play a key role in our learning (Waters and Beck, 2015). Research with full-term 2-day-old babies identified an early interest in observed touch gestures with greater social content; hand-to-hand in preference to object-to-hand. The team suggested that gestures with a strong social aspect were vital in activating newborns' visual attention, and that observation of body touch provided them with important data about the social world from the early days of life (Addabbo *et al.*, 2015). Furthermore, research with older children around perceptual access (the use of the senses to build focused understanding) identified that 6-year-old children who explored a set of objects through touch or sight appeared to have an enhanced understanding of their features in comparison to peers who had heard a description only (Waters and Beck, 2015). Indeed, it would seem that infants and young children use their senses in complex combinations to understand the world around them; Kretch and Adolph (2017) examined the explorations of 14-month-old infants when faced with a series of bridges ranging in width, and found that their investigations were 'organized', incorporating an 'efficient' mix of sight, touch and movement.

Touch has also been linked with language acquisition; Seidl *et al.* (2015) found that touch cues supported 14-month-old infants to locate body part words in continuous

speech. Similarly, Abu-Zhaya, Seidl and Cristia (2017) explored the combination of touch and speech in a study where mothers read books about body parts and animals to their 5-month-olds. The findings indicated that the mothers used 'exaggerated' touch and vocal cues, as well as touching infants' corresponding body parts. The authors concluded that touch cues could support the development of both word segmentation and acquisition.

Montagu (1986) claims that the human skin is the largest and most sensitive of our organs, offering us protection and the earliest channel of communication. The literature reviewed here concurs with this, positioning touch as a source of comfort and emotional regulation, and a medium through which we communicate and learn. It seems to have a particular potency when combined with other senses, which appears pertinent to our understanding of the function of infant massage.

2.4.3 Intersubjectivity

Definition and context

The term intersubjectivity refers to a shared state of mind between individuals. Trevarthen (2015) describes this as 'reciprocal consciousness', and Garte (2015) defines it as *"…shared subjectivity, or seeing from the same eyes. …"* (p.192). In 'The MIT Encyclopedia of the Cognitive Sciences', Wilson and Keil (1999) state that human intersubjectivity presents as an empathic recognition of feelings and conscious capacity in others, and is communicated via bodily modes, particularly

facial, vocal and hand gestures. In turn, these signals provide information relating to the intentions, emotions and 'symbolic ideas' of the participants. Many researchers posit the view that the young infant is born with an innate drive to connect with others (Stern, 1977; Murray, 1991; Trevarthen, 1998; Trevarthen, 2011). Indeed, Stern (1977) claimed that both infant and carer have an evolutionary predisposition towards a state of dyadic synchrony; one that is complex and instinctive.

The study of infant interaction was transformed in the 1970s when researchers including Bateson, Brazelton, Bruner, Stern, Trevarthen and Tronick began to use video to explore infant-mother exchanges, leading to a new understanding of the infant as active and engaged (Burriel and Brugue, 2014). This contrasts starkly with reports of academics and medical professionals, who stated that whilst training in the 1970s, they heard well-regarded psychologists claim that newborn infants had no cortex, and the most basic of automatic responses, *"...that they were, in fact, slightly animate vegetables – carrots that could cry…"* (Gopnik, Meltzoff and Kuhl, 2001a, p.143). It would seem that video-based research began to advance a new proposition, with the infant recognised as a capable and engaged human being.

Features of intersubjectivity

Intersubjectivity is positioned as clearly distinguishable from the concept of attachment (explored in Section 2.4.4); Cortina and Liotti (2010) claim that the central purpose of attachment is one of protection, whereas intersubjectivity supports communication and 'social understanding'. Similarly, Trevarthen (2012)

views attachment as linked to promoting feelings of safety and comfort, whereas intersubjectivity relates to a deep sense of togetherness, and incorporates 'playful discovery'. Furthermore, the child's drive towards playful engagement is thought to be rooted in a human need to construct meaning in conjunction with others (Trevarthen, 2001; Trevarthen, 2011). I believe this theory links strongly with a study where parents' joint attention pointing behaviours (whilst sitting with their infants on their laps) were found to be linked to higher levels of parental smiling and positive emotion (Leavens *et al.*, 2014). It would appear that there is a sense of joy in our shared moments with others.

Musicality

Another key feature of intersubjectivity is its musical and rhythmic nature, identified by a number of researchers in studies of intersubjective interactions. Through observations of a mother's engagement with her young infant, Stern (1977) identified rising pitch, 'hellos' that both lengthened and increased in emphasis, and repetition. He later developed the term 'proto-narrative envelope' (Stern, 1998 and 2002) to describe infant-carer interactions; short phrases of engagement each with a beginning, middle and end, and incorporating a 'dramatic tension'. Bjorkvold (1992, p.13) viewed the mother-infant interaction as mutually enhancing and with shared timing: *"Mother and child "swing" together in a common rhythm, and in so doing strengthen each other's identity. …".* Bateson (1979) identified joyful, co-ordinated interactions between a mother and child, which she named 'proto-conversation'. This also featured shared gaze and attention, 'ritualized courtesy', and the reactivating intervention of either partner when the dialogue faltered.

Trevarthen and Malloch (2002) posit the view that the young infant has an innate understanding of the musicality of human interaction, which can be observed in the early minutes after birth. Malloch (1999) used computerised acoustic analysis techniques to examine infant-carer vocal interactions, and found that three components, namely 'pulse', 'quality' and 'narrative' came together to create 'communicative musicality'. Pulse related to the precise timing of shared vocalisations, whilst quality related to pitch-contour (the perceived pitch of sound over time) and tonal quality (timbre). The narrative was a combination of pulse and quality, drawing the dyad together in a shared appreciation of 'passing time'. Malloch (1999, p.48) surmised that communicative musicality was critical to positive dyadic communication, functioning as *"…the vehicle which carries emotion from one to the other. …".* Moreover, movement through gesture, vocalisation and emotion was also key to permitting communicative musicality to occur. However, when human capacity to share emotions with others was subdued, it seemed to negatively affect the musicality of the three elements.

Infant Directed Speech

Infant Directed Speech (IDS) or 'motherese' is a songlike form of speech which is directed towards the infant, charged with affection (Trevarthen, 2015), and multi-modal (Espanol and Shifres, 2015). In the first days of life, it supports the carer in gaining and maintaining the infant's attention; in the following weeks, it can be key to the regulation of the infant's emotions and behaviours (Espanol and Shifres, 2015). Trevarthen and Malloch (2002) claim that IDS supports social interaction and

language acquisition, and that the young infant is both more engaged with and more ‘emotionally positive’ about this form of speech.

The infant’s preference for IDS appears critical. In a case study focusing on a postnatally depressed mother and her infant which concurred with Malloch’s (1999) observations of communication, Robb (1999) found that the mother’s turn–taking behaviours were affected, and that vocalisations were quieter, lower-pitched, and interspersed with longer pauses. Correspondingly, the infant was observed to match the mother’s vocal pitch, and mood state; arousal and engagement were also negatively affected. Compared with a ‘healthy dyad’, interactions were observed to be significantly slower and less synchronised. However, over time, and as the symptoms of depression eased, the interactions of the depressed mother and infant improved.

Similarly, Gratier (1999) studied the rhythms of vocal interactions between immigrant Indian mothers and infants living in France, and contrasted them with those of French mother-infant dyads living in France, and Indian mother-infant dyads living in India. Immigrant dyads were found to have less synchronised dialogues than non-immigrant dyads, and this was thought to be linked to immigrant mothers’ ‘identity confusion’. Taken together, these studies may suggest a negative effect on dyadic timing connected to the mothers’ sense of wellbeing, and emotional and physical displacement. Furthermore, and making an explicit link between intersubjectivity and attachment, Jaffe *et al.* (2001) claimed that the level of

synchrony in the ‘vocal rhythm’ between infant and carer at 4 months may be predictive of attachment at 12 months.

Research focusing on the effects of music and song appear to demonstrate findings of particular relevance to this study. A research project (Van Puyvelde *et al.*, 2014) using music, song and movement with a group of mothers and infants at a residential postnatal depression unit found that participants demonstrated markedly increased levels of intersubjective behaviours at the end of the 5 week programme. The techniques used included vocal and gestural games, and mimicry and pantomime, which were modelled by the first and second authors of the study. The aim was to scaffold infant-carer interactions, particularly ‘companionship’ (Trevarthen, 2001) and the intense and fleeting emotions known as ‘vitality affects’ (Stern, 1985). Findings were that the dyads appeared positively influenced by this environment which *“...allowed them to re-experience particular feelings of liveliness, vitality, and finally joyfulness.”* (Van Puyvelde *et al.*, 2014, pp.229-230).

In a study which explored the role of children’s singing in a day nursery, Niland (2014) found that Malloch’s (1999) concept of communicative musicality was apparent through children’s instinctive bodily and vocal engagement with songs. Significantly, songs were found to be key in bringing the nursery community together, assisting children in building relationships, and from this a feeling of ‘belonging’. With regard to younger infants, Shenfield, Trehub and Nakata (2003) assessed the effects of maternal singing on the cortisol levels of healthy 6-month-old babies, and found that it had a modifying effect on levels of arousal. It would

seem that music and song has the power to support regulation, and to connect and reconnect us with joy and each other. This is an important element of the infant massage environment.

Imitation and mirroring

Another important feature of the infant-carer interaction is that of imitation. Trevarthen, Kokkinaki and Fiamenghi Jr. (2010) state that imitative behaviours are usual amongst babies and toddlers before the acquisition of spoken language. Moreover, from the very earliest interactions with others, newborns demonstrate both a drive to imitate and specificity in their imitations. Trevarthen and Malloch (2002) highlight the 'precision' in the young infant's 'mirroring' behaviours; the smiles and vocalisations are, they claim, confirmation of the reciprocity of the communication. Furthermore, the infant is thought to synchronise with and predict the adult's vocalisations and gestures. Similarly, the adult will frequently imitate the baby's utterances; a delicate and emotional reciprocity is at play. Trevarthen, Kokkinaki and Fiamenghi Jr. (2010) claim that imitation is used from the very earliest stages of life to 'motivate' our dyadic partners.

Mirror neurons / somatotopy

Ammaniti and Trentini (2009) credit the discovery of mirror neurons to Gallese *et al*. (1996) and Gallese (2001). The group's 1996 paper described a study of the brain activity of two macaque monkeys when performing a set of prescribed activities, and when observing a similar action carried out by the researcher. They found that

a set of F5 neurons, (known as ‘mirror neurons’) were activated in both the performance and observation phases of the study. The team believed that the F5 neurons in macaques were equivalent to the Brocca’s region in the human brain. A similar system was thought to be present in humans, playing an integral role in the recognition of both speech and physical gesture. In a later paper, Gallese (2001) extended this theory to include the significant influence of mirror neurons on the human capacity for emotional as well as physical empathy for others. He posits the view that humans are able to share a diverse range of psychological, affective and bodily experiences with others, which was named the *“…shared manifold of intersubjectivity…”* (p.44)

Marshall, Saby and Meltzoff (2013) conducted research with 14-month-old human infants with the aim of establishing a link between action perception and production in the earliest stages of development. Infant brain activity was analysed during ‘execution’ and ‘observation’ trials; their findings correlated with the earlier work of Gallese et al. (1996) and Gallese (2001):

> We hypothesize that these somatotopic patterns index an intercorporeal mapping of corresponding body parts between self and other. We further propose that infants’ ability to identify self-other equivalences at the level of body parts underlies infant imitation and is an ontogenetic building block for the feelings of intersubjectivity we experience when socially engaged with other people.
>
> (Marshall, Saby and Meltzoff, 2013, p. 22)

In addition to the human infant's sophisticated mirroring capacities, Stern (1977) and Ammaniti and Trentini (2009) recognised the infant's sense of purpose when interacting with the carer. Demonstrating congruence with Bateson's (1979) observations of proto-conversational behaviour, Stern (1977) wrote of an observation of a baby taking the 'initiative' to reactivate an ebbing dialogue. Moreover, he claimed that around the age of 3 months, the infant has developed proficiency in a wide range of behaviours facilitating effective initiation and termination of interactions with carers. Ammaniti and Trentini (2009) labelled these aptitudes 'regulation behaviours'. Whilst exploring the underlying mechanism of infant imitation, Nagy and Molnar (2004) found that newborn babies were able to respond through imitation, and spontaneously reproduce earlier gestures to 'provoke' a response from the experimenter, perpetuating the interaction. They surmised that this may be an example of early dialogue.

An interaction that is at times mismatched

An important element of dyadic interaction is what Beebe and Lachman (1994) named 'disruption and repair', where the infant and carer experience moments of misattunement, followed by reparation and a return to attunement. Tronick and Reck (2009) present this as an important early learning experience; in typical circumstances the reparation experience builds a sense of trust between the infant and carer, a feeling that challenges can be worked through, and that negative emotions can be supplanted by positive ones. In my view, this provides an important and realistic counterbalance to accounts of an idealised dyadic state, and could be a supportive learning point for new families.

Intersubjective development

Stages in intersubjective development have been identified by a number of theorists; Loots, Devise and Sermijn (2003) mapped out four stages of intersubjectivity; 'emerging', 'physical', existential' and 'symbolic'. The authors state that they took influence from Crossley's (1996) conceptual work on radical and egological intersubjectivity, and Stern's (1985) theories around the 'interpersonal world' of young babies. For the purposes of this study, I will focus on the three intersubjective stages identified by Colwyn Trevarthen and colleagues. The stages are known as primary, secondary and tertiary intersubjectivity.

The first stage, primary intersubjectivity, was identified by Trevarthen and his students through film recordings of face-to-face interactions between young infants (aged 1 to 3 months) and carers. The researchers observed the infants' capacity for highly complex and intricate multi-modal interaction behaviours with others (Trevarthen, 1979). Primary intersubjectivity is characterised by gestures, vocalisations, and facial and bodily communications as well as expressive and emotional turn-taking behaviours between the infant and carer (Trevarthen and Aitken, 2001). The interaction has a 'dance-like' quality (Braten, 1998) and includes the emergence of proto-conversation (Trevathen, 1998). There is a simplicity to this, as Fivaz-Depeursinge, Lavanchy-Scaiola and Favez (2010, p.125) claim*:*

"…primary intersubjectivity characterizes interactions that have no topic other than the interaction itself."

Secondary intersubjectivity, established around the age of 9 months, is hallmarked by the inclusion of inanimate objects into the intersubjective dialogue; a 'person-person-object' capacity (Trevarthen and Hubley, 1978; Trevarthen and Aitken, 2001), also known as 'shared attention' or 'joint attention'. This is the means through which the infant learns about their world, seeing how others interact with the objects in it (Gallagher, 2008). Behaviours are divided into two types; 'responding to joint attention' (RJA) where the infant responds to the eye gaze and gesticulations of others, and 'initiating joint attention' (IJA), where they use physical signs and eye contact to encourage others to attend to objects, occurrences and themselves (Mundy et al., 2007a; Mundy and Newell, 2007b). Tertiary intersubjectivity refers to the period of between 2 and 6 years when the child engages in symbolic dialogue with real and imagined partners, and develops a comprehension of the minds of others (Braten and Trevarthen, 2007).

Triangular communication and group competence

Research around infant capacity to interact simultaneously with multiple caregivers indicates that this occurs at an early age. Fivaz-Depeursinge, Lavanchy-Scaiola and Favez, 2010) worked with 3 to 4-month-old infants and their families in a range of contexts and found that they had the skills to interact effectively with two carers at the same time. They also claimed that the content of the young child's triangular interaction develops in the same way as dyadic communication; shifting from primary to secondary intersubjective forms. Moreover, and in a departure from traditional thinking, the team suggested that through the inclusion of a third person at an early stage, triangular communication was an important bridge between

primary and secondary intersubjectivity. In a study of infant sociability in the context of infant-only groups of three, Selby and Bradley (2003) found that children aged 6 to 12 months demonstrated group communication skills, including the capacity to simultaneously interact with more than one person. It is my view that these studies support Trevarthen and Malloch's (2002) description of the young infant as a 'little social being', as well as providing important conceptual frameworks through which to consider the functions of the infant massage group.

Other pertinent research

This literature search has located a number of research articles focusing on intersubjective development amongst children who have individual developmental and sensory needs. These are important areas of study if we are to more effectively meet the needs of all of the children in our care, and could have important connections to the practice of infant massage. Hahn *et al.* (2013) explored the connection between early intersubjective skills, namely joint attention and affect sharing, and beginning to understand intentionality amongst sixteen children (25 to 57 months) with Down Syndrome (DS). The group was compared with sixteen 'developmentally matched' children with other special developmental needs. The team found that children with DS demonstrated high rates of joint attention and affect sharing (shared emotions with others) but these were linked to lower levels of understanding of intentionality. The researchers surmised that the findings concurred with Fidler's (2006) earlier work which suggested that the development of social cognition for individuals with DS follows a unique route.

Other studies have examined the intersubjective development of children with sight and hearing difficulties. A review of thirty-one studies focusing on the intersubjective development of children with sensory difficulties found that there was commonly a lag in this aspect of development, and particularly in the emergence of joint attention capacities (Damen *et al.*, 2015a). The same team also studied the effects of the 'High-Quality Communication (HQC) Intervention' amongst people with sight and hearing difficulties (Damen *et al.*, 2015b). HQC was a programme developed by Damen *et al.* (2014) to support the social partners of people with sight and hearing difficulties to share emotions through physical contact, to use objects to develop joint attention, and to be more responsive and attuned (Damen *et al.*, 2015b). Whilst the study (2015b) worked with adult participants with sight and hearing difficulties, the developmental ages of most were estimated at approximately 2 years. Findings were that HQC strategies supported the development of intersubjective behaviours, and the team viewed this as an approach with potential for supporting the communication of people with sight and hearing difficulties.

Roos, Cramer-Wolrath and Falkman (2016) explored the intersubjective engagement between parents and infants across the first 18 months of life where both members of the dyad had hearing difficulties. In contrast to other studies, this team found that the participating infants' intersubjective development was in line with that of hearing infants. Indeed, the infants in the study appeared to both follow and participate in interactions. The researchers also pointed out that the infants' parents viewed them as skilled communicators from the early days of life. This, I

believe, is a critical disposition which allows the infant's competencies to be noticed and supported.

It would seem that infant massage could play a critical role in supporting the development and enhancement of infant intersubjectivity amongst a wide range of babies and families. The infant massage environment encourages a focused engagement and a stimulating multi-channel and musical communication between the infant and carer, as well as opportunities to connect with other babies and adults.

2.4.4 Attachment

Definition and historical context

Attachment theory is based around the significance of early relationships and their influence on a child's subsequent life course (Golding *et al.*, 2013). The psychoanalyst John Bowlby was the originator of attachment theory. He believed that the infant came into the world with an instinctive drive to attach to a primary caregiver, and that the purpose of this was to ensure 'protection from predators' (Bowlby, 1964 and 1997). His theories drew influence from a range of other academics, including the ethologist Lorenz's work around imprinting behaviour, and the psychologist Harlow's studies of rhesus monkeys (Bretherton, 1992; Bowlby, 2005a). It would seem that Bowlby was predisposed towards collaborative learning, as in the 1960s he established the Tavistock Study Group. This included early

childhood researchers from a wide range of theoretical backgrounds, as well as a number of respected animal researchers, significantly influencing the further development of attachment theory (Bretherton, 1992).

The foundations of attachment theory emerged across three seminal papers; 'The Nature of the Child's Tie to His Mother' (1958a), 'Separation Anxiety' (1960a), and 'Grief and Mourning in Infancy and Early Childhood' (1960b), and were widely critiqued by the British Psychological Society. A further two papers on 'defensive processes' around mourning remained unpublished (Bretherton, 1992). The first paper addressed what Bowlby defined as 'attachment behaviour'. These 'instinctual' behaviours developed across the first year of life, with the purpose of connecting the infant and carer. They included 'sucking', 'clinging', 'following', 'crying' and 'smiling' behaviours, initially developing fairly independently of each other, and aimed at eliciting maternal responses (Bowlby, 1958a). The second paper examined the child's response to separation from the attachment figure, describing three stages; 'protest', 'despair, and 'detachment' (Bowlby, 1960a). The third paper proposed that when the attachment figure remained unavailable, the infant experienced grief and mourning equivalent to loss responses observed amongst adults. The effects of loss of the attachment figure from the age of 6 months, and up to four years from this point were thought to be significant (Bowlby, 1960b). In sum, Bowlby's theories 'revolutionized our thinking' in relation to the child's attachment relationship to the mother, and how it could be affected by separation and loss (Bretherton, 1992).

Internal working model

Bowlby also theorised that towards the end of the first year of life, the young infant's early attachment experiences informed the development of an 'internal working model'; a blueprint for how the world and people in it were expected to behave, and from which the infant would make their 'attachment plans' (Bowlby, 1997). This is a critical concept to this study, as it claims that the child's relationship experiences in the early months of life are pivotal to their expectations of future connections with others.

Features of attachment and attachment behaviour

In the text 'The Making and Breaking of Affectional Bonds' (2005b, pp.154-156), and initially described in an earlier paper (Bowlby,1975), John Bowlby identified seven key attributes of attachment and attachment behaviour, namely 'specificity', 'duration', 'engagement of emotion', ontogeny', 'learning', organization' and 'biological function', summarised below:

i) Specificity

The attachment behaviour is displayed towards one or a small number of people, usually with an evident hierarchy.

ii) Duration

Attachments are longstanding, continuing for a substantial portion of the lifespan. In adolescence an individual may add further attachment figures to the known group; on occasion they may replace the early attachments altogether. However, it is more usual that first attachments endure.

iii) Engagement of emotion

The activation, maintenance, disruption and renewal of attachment relationships elicit very powerful emotions; the anticipation or loss of a relationship can stimulate anxiety and sorrow respectively, and both can lead to anger. By contrast, the development of a bond is akin to 'falling in love'; a consistent attachment generates a sense of security, and the renewal of a connection is a source of delight.

iv) Ontogeny

In most human babies, the identification of a primary attachment figure occurs during the first nine months; this will be the person who is the child's main caregiver. The likelihood that attachment will take place corresponds directly with the quantity of social interaction the child has with the attachment figure. The capacity for attachment is high until the age of 3; after this age it usually declines incrementally.

v) Learning

Learning to differentiate between the known and unfamiliar is a key feature of the attachment process. Attachment can occur despite punitive behaviours displayed by the attachment figure.

vi) Organization

At the end of the first year of life, the infant's attachment behaviour becomes increasingly complex, and includes working models of the infant's environment and self. Attachment behaviour is triggered by unfamiliarity, fear, hunger and tiredness, and assuaged by the sight or

sound of the attachment figure, particularly through positive interaction with them. When attachment behaviour is highly activated, touching, holding onto and being held by the attachment figure may be necessary to bring it to a close. However, when the infant is aware of the presence or location of the primary attachment figure, the attachment behaviour stops and the child feels safe to explore the world around them.

vii) Biological function

Attachment behaviour is evident in the infants of almost all types of mammals; in many it occurs throughout the lifespan. In the majority of mammals that display this behaviour, the young seek out a significant adult (which is usually the mother). Attachment behaviour, is, therefore, likely to be linked to survival.

Other views on attachment theory

Rutter (1972) disputed Bowlby's views that the propensity for attachment was influenced by the quantity of time spent with a potential attachment figure, claiming instead that *"…intensity rather than the duration of the interaction, is the crucial feature…"* (p.18). My view is that it is likely to be a combination of time *and* interaction quality. Ainsworth *et al.* (1978) expressed concerns that readers of Bowlby's work had mistakenly conflated attachment and attachment behaviour. Consequently, this had created a number of misconceptions including; the ebbing of observable attachment behaviours as indicating that the attachment had 'disappeared', the vigour with which the child expressed attachment behaviour as a

marker of attachment robustness, and the attachment existing exclusively in the context in which the child interacted with the mother.

Strange Situation Procedure

Mary Ainsworth was significant colleague of Bowlby's, devising empirical tests which reinforced and further extended attachment theory (Bretherton, 2003). The 'Strange Situation Procedure' (SSP) was a 20 minute protocol developed by Ainsworth and colleagues (Charlwood and Steele, 2004), and consisted of eight phases, beginning with what was anticipated to be 'least stressful' for the 1-year-old infant (Salter Ainsworth *et al.*, 2014). Initially, the child spent time in the experimental room with their mother, followed by the introduction of a stranger and subsequent departure of the mother. A few minutes later, the mother returned and the stranger left the room. A second period of separation then occurred, with the mother leaving the room once more. Lastly, the stranger returned, followed by the mother (Ainsworth *et al*., 2014).The phases were intended to examine the child's responses to separation from, and reunion with, their mother (Holmes, 2014).

In the case of the second separation episode, the aim was to explore whether distress was linked to being alone or being left for a second time, and whether separation caused more upset than being with a stranger (Ainsworth *et al.*, 2014). Whilst I may feel uncomfortable at the distress caused to the infants who participated in this study, we must also acknowledge that Ainsworth and her colleagues contributed valuable understanding to the field of attachment theory,

identifying three attachment styles in the process. Indeed, the approach is still widely used today; more recent research and the ethics around this are discussed later in this chapter.

Ainsworth and her team made video recordings of the dyads who participated in the SSP (Flaherty and Sadler, 2011; Ainsworth *et al.*, 2014). Through their analyses of infants' behaviour, particularly during reunion phases with their mothers (Flaherty and Sadler, 2011), the three attachment styles identified were secure (Group B), anxious-avoidant (Group A), and anxious-resistant (Group C) (Ainsworth *et al*., 2014). Main and Solomon (1990) later identified a fourth attachment style; disorganised / disorientated (Group D).

Secure base and maternal responsiveness

Ainsworth is also credited with identifying and naming the concept of 'secure base' (Bretherton, 2003; Holmes, 2014), which is set out in a 1982 book chapter 'Attachment: retrospect and prospect.' Ainsworth saw the attachment figure as the secure base from which the child could explore the world around them (Bretherton, 2003) and to which the child would return when they perceived danger, were unwell, or had experienced a separation (Holmes, 2014). Moreover, Ainsworth identified a connection between the caregiver's responsiveness and security of attachment, finding that the mothers of securely attached infants displayed greater sensitivity in their reactions to infants' cues than mothers of infants with anxious attachments (Ainsworth, 1979). Furthermore, 'maternal responsiveness' to the

child's cues was seen as supporting communication development (Bell and Ainsworth, 1972).

Along similar lines, Winnicott (2006) observed behaviour amongst new parents which he named 'primary maternal preoccupation'. This was a mother's ability to transfer focus from herself to her new infant. He believed that this capacity meant that the mother had an intrinsic understanding of her baby's feelings, and knew what to do in the best interests of her child. Winnicott felt that this maternal expertise was beyond the experience of medical professionals, and it is a belief in this parental expertise that has influenced the design of this doctoral study.

Monotropy and secondary attachment figures

Bowlby (1958a; 1997) believed that the young infant's attachment behaviour was usually focused on one preferred attachment figure; he named this 'monotropy'. However, Rutter (1972;1981a), whilst acknowledging that Bowlby saw the primary attachment figure as critical, also directs us to comments made in a paper (Bowlby, 1958b) which supported occasional care provided by others such as the father, grandmother, relative or neighbour. Rutter (1972; 1981a) believed that Bowlby's theories had been misunderstood and misused to support beliefs that only continuous 24 hour care provided by one person would suffice. One might interpret this as the early acknowledgement of the role of secondary carers; a small group of other known adults who care for the child when the primary carer is not available

(Golding *et al.*, 2013) and to whom I think Bowlby refers when discussing the specificity of the child's attachments (2005b), discussed earlier in this section.

Consequences of early attachment experiences

Early relationship experiences are thought to influence the infant's internal working model (discussed earlier in this section); their understanding of the world, the people in it, and how they are likely to behave (Bowlby, 1997), or 'theories of love' (Gopnik, Meltzoff and Kuhl, 2001a). Moreover, these early experiences are also thought to affect the child's future relationships (Bowlby, 2007); they are the *"…test-bed for all other attachments he or she will make…"* (Murray-Parkes, Stevenson-Hinde and Marris, 1991, p.1).

When a secure attachment has been established with one or more significant carers, this thought to enhance mental health resilience (Dowling, 2005; Bowlby, 2007). As secure children develop, they are able to manage, control and appropriately express a wide range of emotions, understand more complex and conflicting feelings in themselves and others, and demonstrate trust towards significant adults. They are sociable and attuned to others (displaying emotional intelligence), and are able to adapt to changing situations. Furthermore, they have enhanced esteem, the ability to control impulsive actions, and demonstrate resilience to challenging situations (Schofield and Beek, 2006). In short, they have "…*an internal working model of self as lovable, others as loving and available and relationships as reliable…"* (Schofield and Beek, 2006, p. 72).

However, when the infant is less securely attached, it is thought to link to an increased risk of mental health issues in later childhood and adulthood (Bowlby, 2007). Young children who have experienced abuse and neglect may go on to develop Reactive Attachment Disorder (RAD), manifested in disorganised and 'inappropriate' social behaviours (Hornor, 2008). Indeed, attachment security at 12 to 18 months is thought to be predictive of preschool behaviour at 4-and-a-half to 5 years (Erickson, Sroufe and Egeland, 1985). Furthermore, in a review of literature exploring the link between attachment and learning, (Ramsdal, Bergvik and Wynn, 2015) concurred with Sroufe *at al*.'s (2005) assertions that a consistent attachment relationship with caregivers led to trust. Ramsdal, Bergvik and Wynn (2015) concluded that the child's 'capacity for trust' was then supportive of their learning.

Lack of parental attunement in the earliest stages of life is believed to negatively affect young babies; Trevarthen and Malloch (2002) claim that children as young as 2 months appear both depressed and withdrawn in this context. Indeed, research exploring potential links between maternal mental wellbeing in the perinatal phase (the weeks before and after birth) and the baby's perceived temperament at 3 months found that perinatal anxiety or depression was linked to heightened perceptions of the child's 'difficulty' (Della Vedova, 2014). This would suggest that parental mental health is a critical factor in the developing attachment relationship.

‘Earned secure’ attachment

It is also important to recognise that although attachment patterns established in the early years of a child’s life can have far-reaching effects, there is also the capacity to alter attachment styles and relationship expectations on the basis of enough new evidence (Golding *et al*., 2013; Gopnik, Meltzoff and Kuhl, 2001a; Schofield and Beek, 2006). The ‘earned secure’ attachment type is particularly significant in the field of social work, and relates to recovering from challenge, and a shift in the internal working model towards increased security (Schofield and Beek, 2006). This gives us hope that through warm and consistent caregiving environments, and services that support this, children who have experienced difficult early childhoods can reshape their ‘theories of love’, and develop trusting new relationships with foster carers and adoptive families.

Other applications of attachment theory

The work of Bowlby and his colleagues James Robertson and Rene Spitz was credited with influencing significant changes in the care of young children (Bowlby, 1997; Winnicott, 2006; Bowlby, 2007). Their studies foregrounded the traumatic experiences of children during long hospital stays and in residential nurseries, quickly leading to the provision of overnight hospital accommodation for parents. The research supported increased familial contact, and children being fostered and adopted rather than living in residential care (Bowlby, 2007). However, other academics observed the slow uptake of attachment theory, claiming that although it gained intellectual significance, this was not translated into practice until the mid-

1980s with the arrival of the Adult Attachment Interview (Charlwood and Steele, 2004).

In a paper addressing the stress and anxiety caused to young children in daycare, Richard Bowlby (2007) recommended that children should be supported to develop long term secondary attachments to a continuously available member of staff. Foregrounding attachment-based settings where family-type arrangements were often used, Bowlby (2007) stressed the significance of the practitioner's willingness to offer an 'emotional commitment' to the baby. Elfer (2006) suggested that there are both strengths and limitations around the allocation of a single key person to a child. This arrangement can offer a great deal of security and joy, but can also prevent interactions with other adults and children, and cause frustration when the key person needs to spend time with other children. Conversely, in settings with a less structured approach to attachment relationships, the absence of a dedicated key person can lead to children's needs being missed, but this can also prompt support connections to be forged with other children.

Looking across these examples, it seems that attachment theory has had a significant effect on the care of children in medical, educative, and social care settings. Whilst there are many views around how attachment theory is interpreted, it is clear to me that warm and attentive attachment relationships are increasingly recognised as critical to children's emotional wellbeing, learning and development.

Recent research around attachment theory

Recent research located through the literature search appeared to focus on four central themes; infant health, parental health and wellbeing, early educational and social experiences, and support programmes and frameworks.

Infant health

Within the theme of infant health, there was a focus on premature birth and the links to attachment difficulties. Pennestri *et al.* (2015) completed a longitudinal study with 162 Canadian mother-child dyads, including twenty-three children who were born prematurely and cared for in Neonatal Intensive Care Units (NICUs). The researchers found that infants admitted to the NICU were more likely to develop a disorganised attachment at 36 months than children who were not, and highlighted the criticality of parental contact and closeness in the NICU and after-care. Indeed, an Irish study of NICU staff perceptions around attachment and emotional and social development amongst preterm babies, practitioner training, and personal consequences of the work (Twohig *et al*., 2016) located a concerning lack of staff training around attachment, and little in the way of psychological support for parents.

However, the vast majority of practitioners stated that they felt confident in discussing the anxiety and emotions associated with premature birth with families, and felt that they had a significant role in supporting the emerging infant-carer relationship and the infant's socioemotional development. Worryingly, staff did not

rate infant crying and gaze as significant communicative cues; the authors of the study suggested that this could be linked to practitioner self-protection mechanisms, a behaviour previously identified by McFadyen (1994) and Cohen (2003).

An Australian study (Barr, 2013) used questionnaires to assess the connection between adult attachment and world views with psychological distress and well-being amongst seventy-one Australian couples whose newborn infants had been hospitalised. The findings suggested that parents who had a strong sense of self-worth and those who felt able to access support from others during stressful periods experienced less distress and improved wellbeing following discharge from the NICU. Orit-Taubman and Spielman (2014) explored the personal growth across two years of 109 Israeli couples of pre and full–term infants, all of whom were first time parents. Parents of preterm infants reported greater personal growth than parents of full-term infants. However, the researchers also foregrounded a 'sense of crisis' which may be felt by parents of both groups as they transitioned to parenthood. They suggested that practitioners needed to prepare parents for these changes, which, they anticipated, would enhance the experience, particularly for parents of preterm babies.

Furthermore, a Swiss comparative study with families of children with and without an orofacial cleft found that there were no major differences between the groups in terms of maternal mental health, dyadic relationships, or attachment security (Habersaat *et al.*, 2013). It was suggested that the multi-agency support offered to families of children with a cleft was a factor in this. Taken together, these studies

would suggest that the support networks provided by new parents' families, friends and health practitioners play an essential role in the transition to parenthood, particularly when families have to cope with additional stresses resulting from infant ill health, which could interfere with the developing attachment relationship. Moreover, they also suggest that the way families respond to stressful events is very individual. This is discussed further in the examination of the concept of resilience (Section 2.4.5).

Parental health and wellbeing

Parental health and wellbeing was also a significant area of research. Two studies located through the search (Della Vedova, 2014 and Rubertsson *et al*., 2015) explored the consequences of maternal mental health issues. The former was a longitudinal study with 107 Italian first-time mothers. Findings were that maternal depression or anxiety was connected with negative perceptions around the temperament of the baby at 3 months. The latter, a study with 718 pregnant women in Sweden used the Prenatal Attachment Inventory – Revised (PAI-R) in early and late pregnancy, and found that mothers with heightened levels of depression had lower attachment ratings. Moreover, perceptions around paucity of partner support were linked with reduced interaction, and the scarcity of support from the mother's parents also had negative effects. Attachment was also connected to the mother's feelings around the forthcoming birth and early weeks with a new baby; women with negative feelings had lower scores across the PAI-R. Both studies stated that preventative structured support during the prenatal period was of critical importance. Rubertsson *et al.* (2015) also claimed that the strength of the prenatal

infant-carer relationship would significantly affect the relationship and caregiving post-birth.

Olza-Fernandez *et al.* (2014) conducted a review focusing on the neurohormonal dimension of the infant-carer attachment process, and concluded that whilst evidence was emergent, interruptions during and around birth including Caesarian section, premature birth and NICU admission could negatively influence delicate dyadic neural and hormonal mechanisms. They surmised that this could affect attachment, mental health and learning outcomes for the child, and recommended that support such as massage and carrying which enhance skin-to-skin contact were used to offset this. Demographic factors have also been found to affect parental emotional availability, which has significance for the developing dyadic attachment; Falco *et al*.'s 2014 study with forty first-time mothers living Nothern Italy found there was a positive correlation between emotional availability and socio-economic status and maternal age, and concluded from this that younger mothers and families with low socio-economic status may benefit from support.

Previous experience of loss has also been linked to attachment issues. A Jordanian study of 190 mothers of healthy full-term infants who had also experienced an earlier perinatal loss found that maternal grief was negatively linked to the attachment relationship with the new infant (Al-Maharma *et al.* 2016). Indeed, in an earlier study (O'Leary and Thorwick, 2008) participating parents stated that they feared forming an attachment with their subsequent child due to fears that this would also result in loss. Parental posttraumatic stress disorder (PTSD) has also

been linked with disorganised and insecure attachment styles amongst children. A study in the Netherlands working with sixty-eight asylum seeking and refugee families found that PTSD was negatively connected to the capacity to offer a consistent and safe environment for children. The researchers surmised that there was an urgent need to offer effective attachment support to refugee families (van Ee *et al.*, 2016).

Early educational and social experiences

Studies have also examined the connections between attachment security and child functioning in social and educational contexts. A Canadian study with sixty-six 13-month-old children and mothers found that children with more avoidant attachment relationships transferred their attention from pictures of faces to pictures of neutral objects at a later stage in the attentional response relative to other children in the study (Meinz *et al*., 2017). The team suggested that these early patterns could be suggestive of attention patterns in later childhood. Indeed, this would indicate to me a level of vigilance amongst less secure children which could affect social and learning capacities. Easterbrooks, Bureau and Lyons-Ruth (2012) found that amongst a group of families identified as having a 'psychosocial risk', mothers' availability in interactions with their 7-year-old children was connected to child attachment behaviours, behaviour difficulties at school and depressive behaviours reported by the children at the age of 8. Similarly, Dubois-Comtois, Cyr and Moss (2011) identified that the emotional quality of mother-child dialogues amongst eighty-three children and their caregivers had a critical effect on attachment security at 4-and-a-half and 8-and-a-half years.

Support programmes and frameworks

Other studies have focused on the effectiveness of support programmes and strategies in relation to the infant-carer attachment relationship. Evans *et al.* (2017a and 2017b) used a randomized controlled trial (RCT) and a case study to explore the effects of the Baby Triple P parenting programme amongst 120 Australian families with very preterm babies. The RCT found that there was no appreciable difference in infant-carer relationship quality, maternal attachment and responsiveness between the intervention and control groups. However, the case study with an individual family found that both parents' depression levels had reduced, and the mother reported improved relationship quality with her baby, as well as enhanced self-belief, attachment and responsiveness. The timing of programme had also supported the parents to consider care for their baby and their own self-care at an earlier stage than they had anticipated.

Wright *et al.* (2017) reviewed fourteen studies which focused on parenting programmes where children were thought to have a high risk of, or demonstrated behaviours that already indicated disorganised attachment styles. Overall, they found that the programmes were linked to a reduction in disorganised attachment, although outcomes did vary. Contentiously, the review also claimed that there was little evidence around the benefits of programmes which began when the baby was less than 6 months, although the reviewers were unclear as to why this was the case.

An Australian study of the ‘Circle of Security’ programme which uses attachment theory to support secure child-carer relationships, found that referred families of children aged 13 to 88 months who participated in the programme demonstrated improvements in reflective functioning, internal models of caregiving, and child secure attachment, as well as reductions in disorganised attachment for families with high baseline scores (Huber *et al.*, 2015). Taken together, these studies suggest that the effectiveness of programmes can vary widely, and in my view underscore the criticality of appreciating families as individuals with unique circumstances, as well as considering the timeliness and appropriateness of support.

Studies exploring parental confidence, sensitivity and empathy have also yielded some interesting findings. Cinar and Ozturk (2014) examined the influence of structured baby care education on maternal attachment and confidence amongst first time mothers living in Denizli, Turkey, and found that there were positive improvements in both, whilst improvements amongst the control group were negligible. Letourneau *et al.* (2015) reviewed the effects of support targeting maternal sensitivity and reflection, and surmised that programmes offered to families during the first 12 months after birth were supportive of early dyadic attachments. Moreover, and of particular relevance to the methods of this study, video feedback was highlighted as an effective tool in supporting maternal sensitivity. This method was also used in a longitudinal study which explored the potential of mindfulness to ‘interrupt the transmission’ of attachment insecurity from one generation to the next (Pickard *et al.*, 2017). Significantly, the team found that an aspect of mindfulness, the capacity to manage one’s own internal experiences

appeared connected to the mothers' ability to manage their infants' distress. In another study, parental empathy was positively connected with child attachment security and found to moderate the link between parents' self-reported attachment styles and attachment amongst children ranging from 7 to 12 years (Stern, Borelli and Smiley, 2015).

However, according to Bailey *et al.*, (2015) there is discord regarding the assessment of parental sensitivity. Their research with 274 dyads living in a large urban area of Canada identified three aspects of maternal behaviour which, the authors claimed, linked with Ainsworth's maternal sensitivity measures (Ainsworth *et al.*, 1974), and were described as 'co-operation / attunement', 'positivity' and 'accessibility / availability'. The team identified the co-operation / attunement dimension as most strongly connected to attachment security at 15 months and 2 years, and surmised that this was a critical element of sensitivity.

A study with twelve maternal and child health (MCH) nurses in Victoria, Australia and focusing on the assessment of infant mental and emotional wellbeing (Bryant, Ridgeway and Lucas, 2016) identified a metaphor known as an 'iceberg' representing the identification of attachment issues. The visible tip related to the easily observed warning signs, and the less visible portions to the underlying elements requiring exploration and further work with families to support positive attachment and infant wellbeing. Of particular interest to this study, the 'skilful collaboration' between MCH nurses and families was foregrounded as pivotal to the in-depth assessment of the below surface issues. This suggested to me the

importance of trusting attached relationships between practitioners and caregivers. Additionally, the study also stated: *"Attachment is a prevalent issue in both high and low-risk families and secure attachment needs to be promoted."* (Bryant, Ridegway and Lucas, 2016, p.43). We must bear in mind that attachment issues can affect *any* new family as they adjust to parenthood, regardless of generic perceptions of risk or relative security.

Reflecting on the concepts proposed by attachment theorists and the findings of recent research, it would appear that infant massage practice could have an important role in supporting early and secure attachments between infants and carers. The environment and techniques seem to offer important opportunities for parents to tune in to their infants' cues, and to respond sensitively and respectfully. In turn, this may assist the development of a positive internal working model and self-regulation skills which support the young infant to engage successfully with social and learning environments. Furthermore, where the attachment process has been disrupted through infant or parental illness, the programme may offer an important opportunity to reset and reconnect.

2.4.5 Resilience

<u>Definition, context and features</u>

Resilience is a phenomenon where some people appear to emerge from adversity with positive outcomes (Rutter, 2007). Garmezy, Rutter and Werner played key

roles in furthering the understanding of the concept, and each had unique personal experiences around this (Masten, 2014). Resilience can relate to animate and non-animate systems such as individuals, families, environments and economies, and relates to the ability of the system to habituate to risk factors which pose a threat to it (Saltzman *et al.*, 2013). The Canadian ecologist Holling (1973, p.14) described resilience as *"…a measure of the persistence of systems and their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables."* Researchers and authors are also clear that resilience does not relate to a personal trait within the individual (Rutter, 2007; Ungar, 2011; Masten, 2014; Tronick and DiCorcia, 2015). Resilience is a dynamic state; people may appear resilient in some contexts or in relation to some conclusions, but not others (Rutter, 2007). Furthermore, according to Rutter (2007), three key aspects must be addressed in the studies of resilience. Firstly, resilience must be considered across the lifespan, as prevailing over adversity may be influenced by experiences following exposure to risk. Secondly, resilience is not a psychological trait. Thirdly, what people do to cope when facing adversity, particularly the mental processes around this.

Rutter (2012) described Werner and Smith (1982) as 'pioneers' who foregrounded the concept of resilience, a critical lifespan view of this, and the significance of support networks. Indeed, in a 2012 interview, Werner commented*:"…resilience is a process that takes time. …"* (p.18) Werner was critical of the short-term nature of much of the research around resilience, and was involved in a three decade-long longitudinal study with children on the Hawaiian island of Kauai (Werner, 1995). She found that children living in challenging environments of extreme poverty,

stress around birth, and complex family issues developed coping strategies that blended independence with a capacity to request support when needed. Werner also expressed concern that risk factors were automatically viewed as a 'certainty' rather than a 'probability' (Werner, 2012), an important concept with regard to this doctoral study which takes a strength-based perspective.

Indeed, Rutter (2006) puts forward the concept of the 'steeling effect'; in some scenarios, the stressful experience reinforces the individual's resistance to subsequent stressors (Rutter, 1981b). There are many conceptual frameworks and hypotheses mapping out the factors which influence resilience, and amongst these the 'Everyday Stress Resilience Hypothesis' (Tronick and DiCorcia, 2015) is of particular relevance to this study as it relates to the very early years of life . Similar to Rutter's (2006) steeling concept, the authors suggest that managing with everyday stresses builds young infants' regulation skills, and in turn lays the groundwork for coping with more challenging stressors later in life.

Rutter (2006) views resilience as an 'interactive concept', combining risk and protective factors as well as the individual's responses to stressors. Similarly, the 'Family Adjustment and Adaptation Response Model' (FAAR) developed by Patterson (2002) uses the image of a balance board to represent the interaction of 'family demands' and 'family capabilities' (risks and protective factors) and 'family meanings'. The family meanings element (Patterson and Garwick, 1994) is of particular interest as it is subdivided into three levels: 1. 'Situational'; the family's

assessment of demands and capabilities. 2. ‘Identity’; perceptions of their family group. 3. ‘World view’; their view of how the family interacts with external systems.

Other researchers have identified particular behaviours in their studies of resilience. In an examination of resilience understanding amongst Australian child health nurses Collins, Pooley and Taylor (2014) listed the essential postnatal coping strategies as ‘adaptation’, ‘responsiveness’, ‘self-confidence’ and ‘social connectedness’. It is positive to see a shift towards the ‘strength-based approach’ foregrounded in Pfeiffer *et al.’s* (2017) study of ‘reproductive resilience’ amongst teenage girls in Tanzania, a stance championed by Werner (1995, p.84) who stated:

> If we want to help vulnerable youngsters become more resilient, we need to decrease their exposure to potent risk factors and increase their competencies and self-esteem, as well as the sources of support they can draw upon.

Resilience research

Research located in relation to this study focuses around three broad and connected areas; child resilience, family resilience around birth, and managing through child illness and death.

Child resilience

A longitudinal multi-method study with 129 children aged 15 months to 9 years and their primary caregivers connected children's family experiences with their capacity to function socially with peers (van den Berg *et al.*, 2017). The researchers claimed that the 'quality' of parent behaviours was related to child 'ego-control' and 'ego-resiliency', concepts developed by Block and Block (Block, J., 1950, 2002; Block, J.H., 1951; Block and Block, 1980; Letzring, Block and Funder, 2005) where ego-control related to the management and articulation of impulse, and ego-resiliency to a responsive ability to adapt ego-control to a changing context. It would seem that parent modelled interaction behaviours influenced the child's aptitudes around social functioning. Other research has examined the resilience of children whose mothers have experienced postnatal depression, and claimed that resilience was associated with two features which are addressed through infant massage; the child's ability to communicate through non-verbal channels at 15 months, and the mother's positive disposition towards parenting (Savage-McGlynn *et al.*, 2015).

Child resilience in the context of military conflict has also been explored; Wolmer *et al.* (2015) undertook research with Israeli pre-school children who had lived through 4 weeks of rocket attacks. They found that children who had experienced multiple 'stressful life events' in addition to the rocket attacks displayed more serious symptoms of posttraumatic stress disorder (PTSD), and that maternal concerns were greater. Conversely, a review of the literature around childhood resilience through conflict highlights the 'protective' capacities of making sense of the experience as an individual, attachment relationships, health of caregivers, and

support through peers, the wider family and social groups (Betancourt and Khan, 2008). Moreover, the authors present a dynamic interaction between 'risk' and 'resilience' factors which influence the mental wellbeing of children living through conflict.

Family resilience

This review located a number of studies which explored family resilience around the birth of a child; in my view an acknowledgement of the challenges associated with the transition to parenthood, discussed in Section 2.4.4 (Attachment). Research relating to low resilience amongst pregnant women living in an inner-city area in the USA identified low self-esteem, perceptions of stress, low levels of support, alcohol use and younger age as factors which could be connected with lower levels of resilience (Lennon and Heaman, 2015). The study highlighted a particular link between self-esteem and resilience and recommended that midwives were ideally situated to work with families to identify and enhance their strengths, and to act as advocates.

Other research has focused on parents' resilience when caring for an infant perceived to have a 'negative temperament' (Verhage, Oosterman and Schuengel, 2015). This study worked with 179 first-time pregnant women, assessing their resilience to negative feedback during pregnancy, and at 3 and 12 months postpartum. The results indicated that amongst women with lower resilience to negative feedback, perceived negative infant temperament was connected to lower

parenting confidence. The researchers concluded that some parents may view negative infant behaviours as a commentary on the quality of the parenting provided.

It is clear that the period around birth is an important time for the delicate child-carer ecosystem, a time when families may need support and encouragement. Indeed, an investigation of the outcomes of the 'Infant Mental Health home-based Early Head Start' programme offered to families in the USA found that participating families reported better family cohesion and relationships, reduced parental stress, and improved coping skills when acting as the family advocate (McKelvey *et al.*, 2015). A central tenet of the Infant Mental Health approach is that enhancement of relationships between the child and significant carers supports the child's social and emotional wellbeing and development (Brophy-Herb et al., 2001; McKelvey *et al*., 2015).

Research has also focused on the effects of adverse childhood experiences and complex pre-existing mental health issues on parental resilience. Kunseler *et al.* (2016) worked with first-time pregnant women who had experienced childhood abuse in a simulated cry response task. Their findings indicated that women with a history of childhood abuse may lose confidence in their parenting abilities more easily than mothers who had not had these experiences. A systematic review (Davidsen *et al*., 2015) of studies examining the effect of parental schizophrenia on the emergent infant-carer relationship found that the evidence was both 'limited' and of 'variable quality' with regard to links between maternal schizophrenia, shared

interaction and child development. Taken together, these studies tell us that families have a vast range of prior experiences, life histories, and current challenges, and therefore require services offered to them to be done so with sensitivity and respect for their unique circumstances.

Child illness and death

There was also a body of research which focused on the effects of difficult birth and post-birth experiences, diagnosis of child illness, and child death. A discussion paper (Janvier *et al.*, 2016) written by healthcare practitioners with personal experience of having a child in the NICU foregrounded the scarcity of studies examining the positive aspects of this experience, and reconceptualised it as a 'life transformation' as opposed to post-traumatic growth. Indeed, the authors claim: *"We did not grow. We are stronger and yet more vulnerable."* (p.2) For children born very preterm or at a very low birth weight, and for whom there are often neurological and developmental issues, there has been a gap in the understanding around the effects of parenting on cognitive and learning outcomes (Wolke *et al.,* 2013). The team found that whilst 'cognitively stimulating' parenting supported the learning of *all* children, 'highly sensitive parenting' in particular was a partial protective factor for the learning outcomes of children born very preterm or at a very low birth weight.

Similarly, a study investigating the language skills of children at 36 months who were born at low weight within the expected range (Madigan *et al.*, 2015) found that

birth weight and responsive parenting were connected to language skills. Furthermore, there was an important interplay between birth weight and parent responsivity; greater responsiveness was linked to enhanced child language skills, and was particularly evident amongst children with relatively low birth weight. The researchers suggested that families should be offered programmes supporting parental responsiveness, with the aim of enhancing language acquisition and potentially life-long learning. These studies underscore the criticality of attuned parenting in the very early stages of life, a parental disposition which is in my view supported through infant massage.

In a review of research scrutinizing families' experiences of traumatic birth and postnatal post-traumatic stress disorder (PTSD), Ayers (2017) claimed that there was a paucity of studies focusing on resilience around PTSD. Moreover, work to support women's feelings of positivity and sense of coping and purpose during pregnancy, birth and postnatally could enhance resilience and reduce postnatal PTSD. Significantly, the author highlighted a strong connection between the support offered to the family and risk and resilience. This has also been identified by Ayers *et al.* (2016) and Horn, Charney and Feder (2016), and suggests to me that the presence or absence, quality, timing and sensitivity of support is critical.

The diagnosis of health and development needs can be an additional source of pressure for families already in the midst of adjusting to the prospect and reality of parenthood. An Australian study investigating the mental well-being of parents after a pre or postnatal diagnosis of congenital heart disease (CHD) identified

significantly higher levels of reported parental anxiety requiring support compared to parents of healthy infants (Kasparian *et al.*, 2017). However, amongst families of children diagnosed with Down syndrome, important positive adaptive features identified included parental health, family connectedness, flexibility and communication, as well as support from the wider family and community. Interestingly, the sociability of the diagnosed child was also an important factor (Choi and Yoo, 2015).

Some families acquire a very challenging set of experiences due to infant death during or shortly after a pregnancy. A Canadian small-scale qualitative study aiming to better understand young children's experiences of loss of an infant sibling found that the home and school were vital to children feeling safe to communicate their unfolding bereavement experiences (Jonas-Simpson *et al.*, 2015). Moreover, there was an interconnected theme of resilience and vulnerability in the accounts of participating children and carers. Witnessing parental vulnerability led to the children feeling more vulnerable whilst also seeing that it was acceptable to be so. Furthermore, a review of studies of family resilience around Sudden Infant Death Syndrome (SIDS) (Gordon, Rowe and Garcia, 2015) saw that there was an 'ebb and flow' of resilience across the rhythms of family life, and in relation to other factors affecting them. The review also called for a more compassionate approach to policy-making to reduce pressures associated with new parenthood, thereby supporting family resilience, and potentially reducing the incidence of SIDS. This resonates with the line of reasoning put forward in Chapter 1 in the exploration of the 'Troubled Families' agenda.

Looking across the research, it would seem that resilience is a dynamic concept, existing at the intersection between the protective or risk factors of individual processing of experiences, family relationships, health, self-esteem and confidence, and support from the wider family and community. This ecosystem is also influenced by the rhythms and cycles of our lives, and by other systems which may collide with it. It also seems clear that support for families making the difficult transition to parenthood is critical. It needs to sensitively recognise and respect their unique experiences and contexts, to be well-timed, appropriate, and to build on their strengths.

2.5 Connecting the five key concepts

The five concepts considered in this review were infant massage, touch, intersubjectivity, attachment and resilience, and infant massage appears to be the vehicle through which the other concepts are addressed. Touch is a key component of massage, providing important opportunities for regulation, communication, shared attention and learning. It appears to have particular potency when combined with other modes of interaction, which infant massage also facilitates. I would also suggest that infant-carer massage provides a unique and focused environment supporting intersubjective togetherness; a musical exchange of feelings and themes, which Wilson and Keil (1999) claim is most effectively communicated through bodily modes such as facial, vocal and hand gestures. It also seems to support carers to observe and respond to children's cues, which could encourage attachment security, the internal working model of 'self as lovable', and children's resilience and self-regulation in challenging situations (Schofield and Beek, 2006).

Indeed, self-esteem (Lennon and Heaman, 2015) and the quality of attachment relationships (Betancourt and Khan, 2008) have been identified as important protective factors supporting resilience.

2.6 Summary and critical reflections - gaps in the research

Reflecting on the literature identified in this review, it would seem that there is a large body of work where experimental designs have been utilised, and including features such as randomised assignation and control group situations. Whilst these studies have, in my opinion, made significant contributions to knowledge in the field of early childhood, they can also raise problematic ethical issues. For instance, in the field of attachment, it would appear that the use of the Strange Situation Procedure is still commonplace. We must question if it is appropriate to expose young babies to stressful situations in unfamiliar surroundings in order to identify attachment styles, and whether this could be achieved using more naturalistic observations.

Amongst the resilience literature, I located a study where pregnant women with a history of abuse participated in a 'cry response' simulation to assess the effects of childhood history on perceptions of parenting capacity (Kunseler *et al.*, 2016). In my view, exposing pregnant women to stress at a time when they may already be working through difficult issues *and* anticipating parenthood is deeply troubling, and may add to the difficulties that families face. I am also uncomfortable with the practice of excluding families from potentially beneficial programmes to provide a comparison 'control' condition. In my view, we need to consider whose interests we

are serving; we cannot put the understanding of a phenomenon ahead of, or at the expense of, the rights and wellbeing of our participants.

There is, I believe, a clear gap in the research literature for a fine-grained, naturalistic and ethical project exploring the experience of infant massage during and around the time that participant families face challenging circumstances. It is my view that this doctoral study will make an important contribution to our understanding of the role of infant massage at this critical time in families' lives. The innovative research design and methods developed for this study aimed to work ethically and affirmatively *with* participant infants, families and practitioners, who were active co-inquirers, *not subjects of* the research, and whose rights and voices were foregrounded at all times. These drivers were key to the methodological decisions which are explored in Chapter 3.

Chapter 3 – Selection of the methodology and methods

3.1 Introduction

Chapter 2 set out the conceptual underpinnings of this project, and Chapter 3 will lead the reader through the paradigmatic, ontological and epistemological decisions linking with my researcher positioning statement in Chapter 1. It will then focus on the identification of the methodological framework for the study, and the methods selected with the aim of getting close to the data. In the later sections of the chapter, the concepts of reflexivity and trustworthiness will be examined, and the techniques used in the study to address them will be mapped. Lastly, the ethical considerations critical to this study will be identified, and a 'matrix' approach to informed consent described.

3.2 The paradigms, theories of knowledge construction, and philosophies influencing the study

This section sets out my paradigmatic, ontological, and epistemological stances, as well as the key philosophical and theoretical influences shaping my positionality as an early career researcher. The term 'paradigm' is defined as *"…a typical example, pattern, or model of something. …"* (Waite, 2012, p.520), and in this context describes the researcher's belief system and conceptualisation of the world. There are a number of alternative terms and phrases used by researchers including 'worldview' (Creswell, 2007), 'theoretical frameworks' (Petty, Thomson and Stew, 2012), and *"…a basic set of beliefs that guides action…"*. (Guba, 1990, p.17). The researcher's paradigm exerts an influence across the research project, including

the selected research focus and questions, methodology and methods, and the interpretation of the data generated. Thomas Kuhn is credited with bringing the term into regular use (Robson, 2011; Guba, 1990). In the seminal text 'The Structure of Scientific Revolutions' (1970), Kuhn claimed that researchers with shared paradigms would usually approach their work with a common set of guiding principles.

The qualitative, quantitative and mixed methods traditions – making a decision

Making a decision around adopting a qualitative, quantitative or mixed methods approach to this study was an iterative process for me. Whilst I did not feel drawn to the quantitative tradition, which, according to Robson (2011), is focused around measurement and numerical data, objectivity, standardization, generalizability and, to my concern, a *"…neutral value-free position…"* (p.19), the mixed methods approach appeared a reasonable bridge between the qualitative and quantitative approaches. Mixed methods emerged, in part, from researcher fatigue around the battle for supremacy between quantitative and qualitative factions (Robson, 2011), a period during the 1980s named 'The Paradigm Wars' (Gage, 1989). The new tradition was a fusion of worldviews, of robust quantitative and qualitative methods and data, knitted together within a research design (Creswell and Piano-Clark (2011). Most significantly, the approach had a clear focus on answering the research questions, regardless of the data type, a critical aspect of any piece of research.

In the early stages of the study development, and set out in my initial research proposal (Appendix 1), I anticipated using a mix of qualitative and quantitative methods to answer the research questions (Chapter 1, Section 1.3.3). However, as I began to develop my research design (this chapter, Section 3.4.1), and linked the research questions to methods that I anticipated would get close to the data, I considered Bennett, Underdown and Barlow's (2013) critique of recent randomised research documenting the health outcomes of infant massage. It seemed that there was a need for a study that aimed to get closer to the dyadic experience of infant massage.

This called for a reconsideration of my approach; it seemed that the qualitative tradition, which, claims Creswell (2007), focuses on building meaning in relation to a social or human experience located in a naturalistic context, and, critically to me, is 'sensitive' to the individuals and locations participating in the study. Moreover, the qualitative approach is subjective, and intersubjective, with participants and researcher engaged in and altered by the research process (Armstrong, 2010). Studies of this type are usually small-scale, use a flexible research design, and involve little or no quantitative data (Robson, 2011). However, concerns abound that the qualitative approach lacks inter-researcher reliability, likened to standing at different points on a riverbank*: "…researchers will produce different descriptions of an object of inquiry depending on…what part of the river they have seen."* (Kincheloe, McLaren and Steinberg, 2011). Furthermore, a lack of rigour has been a flaw identified in some qualitative research in the field of education (Tobin, 2005).

By contrast, Guba and Lincoln (1994) question perceptions of quantification as the gold standard in research. Amongst the challenges associated with this approach are 'context stripping' (where quantification removes other variables through controls and randomization), the removal of 'meaning and purpose' (which, they claim, is essential to understanding human behaviour), and that generalizations may not apply to individual cases. Moreover, they state, the 'facts' (research findings) generated through the research process are impacted by the theories (hypotheses) and values of the researcher, who is both engaged with and influencing the study. Having balanced the strengths and limitations of the traditions, I decided to proceed with a small-scale qualitative study, which aimed to generate 'thick' descriptions of participants' experiences of infant massage, and to adhere to Lincoln and Guba's (1985) principles of 'trustworthiness' in qualitative research (this chapter, Section 3.5).

Paradigmatic stance

According to Denzin and Lincoln (2011), qualitative research is comprised of four main paradigms: 1. Positivist / postpositivist. 2. Constructivist-interpretive. 3. Critical. 4. Feminist-poststructural. At an early stage, I was drawn to the constructivist paradigm which links back to my core beliefs that reality and human experiences are complex. Whilst there are often common themes across experiences, there are also highly-individualised stories. Constructivism takes the stance that reality is built through social collaboration (Flick, 2014; Mertens, 2015). This contrasts with the positivist paradigm, which is based around objectivity and scientific logic, where reality is both singular and 'stable', and can be observed and

quantified in the pursuit of 'facts' (Petty,Thomson and Stew, 2012). Whilst there may be concerns that the constructivist paradigm is messy and confusing, the positivist paradigm, in my view, and in the literature I have examined, can be ethically challenging when attempting to isolate and examine human experiences which are interconnected and complex.

Bateson (2000) defines the researcher's ontological and epistemological beliefs as an inextricably connected 'net', and I would agree that having identified a paradigmatic stance, there is a logical flow linking paradigm, ontology (the nature of reality [Hesse-Biber and Leavy, 2011]) and epistemology (theory of knowledge construction). Denzin and Lincoln (2011) therefore claim that the constructivist 'net' contains a relativist ontology, where the world can be experienced in many ways, and through multiple realities, a subjectivist epistemology where *"…knower and respondent co-create understandings. …"* (p.13), and naturalistic (real world) methodologies. Whilst I am strongly drawn to the relativist ontology and a socially constructed epistemology as proposed by Vygotsky (1978), I am also aware that epistemology is more than a belief system around knowledge construction, including an understanding of how the working relationship between the researcher and participants will function (Hesse-Biber and Leavy, 2011). To this end, I interpret the research participants and the researcher to be both 'knowers' *and* 'respondents', working collaboratively and respectfully in the act of knowledge construction.

Theorists

My stance is also influenced by the work of Martin Buber and Jerome Bruner, who both had strong beliefs around the co-construction of knowledge. Buber (1970) wrote of a 'universal reciprocity' in which there is a dynamic interchange between individuals, and where students educate their teachers. Bruner's keynote speech (1996, p.139) at the *'Growing Mind Conference'* used a powerful metaphor to compare and celebrate the contrasting work and theories of Vygotsky and Piaget: *"Just as depth perception requires a disparity between two views of a scene, so in the human sciences the same may be true: depth demands disparity."* Bruner highlighted a richness imparted through multiple perspectives, yet it is also important to acknowledge that complexity can lead to a lack of clarity. It is my belief, however, that the world is complex, and that there are many individual interpretations of reality which must be recognised.

Paulo Freire's (1996) critique of the 'banking' approach to education had a deep effect on my thinking as I began to reflect on the deficit model and negative language often associated with families facing challenging circumstances. The banking concept is one where teachers fill the supposed empty and passive vessels of the students' minds with 'narrated content', and where *"…knowledge is a gift by those who consider themselves knowledgeable upon those whom they consider to know nothing. …"* (p.53) I believe that we are conscious and capable beings from (and before) birth, that our interactions in life and throughout our research processes should be imbued with respect and a deep recognition of the knowledge

that our participants hold, and with whom we collaborate in an attempt to unlock their experiences.

3.3 Selection of the methodological approach

The research methodology has been likened to a ‘bridge’ (Kramer-Kile, 2012; Hesse-Biber and Leavy, 2011) or ‘malleable guide’ (Hesse-Biber and Leavy, 2011). Denzin and Lincoln (2011, p.25) describe it as a ‘strategy of inquiry’, linking the researcher’s paradigm with the observable world, and directing them towards specific research methods. I visualise it as a crucial arterial connection, joining the researcher’s paradigmatic, ontological and epistemological positions to the research design and methods. Having located myself and the study in a constructivist paradigm, where multiple perspectives and realities are acknowledged, and where understanding is built in partnership with others, it was important that I selected a methodology that supported these beliefs. Furthermore, the methodology needed to connect with the central aim of the study; to gain an in-depth understanding of families’ experiences of infant massage. To narrow the methodological decision, I spent some time examining a range of methodologies and potential features of the project, initially concluding that the phenomenological and case study methodologies had the strongest connections to this study of infant massage.

3.3.1 The phenomenological approach

Phenomenology is both a philosophical school of thought and a methodological approach (Flood, 2010; Gill, 2014). As a methodology, it seeks to uncover and

describe the ‘essence’ of individuals’ experiences (Denscombe, 2010; Flood, 2010; Creswell, 2007); where participants’ individual encounters with the phenomenon overlap (Creswell, 2007). There are two main types; the founder of phenomenology Husserl’s descriptive approach, and his student Heidigger’s interpretive evolution of the methodology (Gill, 2014). The former is known as transcendental phenomenology, and requires that the researcher ‘brackets’ their beliefs and perceptions, as if encountering the phenomenon ‘freshly’ (Moustakas, 1994). The latter is named hermeneutic phenomenology, and, as opposed to the *“…pure description of lived experience…”,* is an *“…interpretation of experience via some ‘text’ or via some symbolic form…”* (Van Manen, 1990, p.25). As the study sought to describe and interpret families’ experiences of the phenomenon of infant massage, and aimed to understand an encounter that was complex and likely to involve feelings and emotions (Denscombe, 2010), it appeared that hermeneutic phenomenology in particular possessed many ideal features.

From an ethical stance, the methodology fitted with my study as it views research participants as equal collaborators (Flood, 2010), and focuses on ‘pure’ experiences that have not yet been analysed or interpreted (Denscombe, 2010). It was my belief that although infant massage had been examined through a number of large-scale studies (Chapter 2), there was a need for a fine-grained exploration of the experience from the perspectives of families and early childhood practitioners. Whilst phenomenology may facilitate a more in-depth examination of human experience, and is thought to suit small-scale projects with limited budgets, where the central resource is the researcher (Denscombe, 2010), there are also a number of disadvantages to consider.

Transcendental phenomenology's requirement that the researcher brackets their own experiences is acknowledged as 'difficult' (Creswell, 2007), and I would suggest that it is not possible with regard to this study. Moreover, according to Denscombe (2010), the approach has been associated with lacking 'scientific rigour', due in part to concerns that it foregrounds subjectivity, and focuses on description at the cost of analysis. Furthermore, according to Robson (2011), there are differences in opinion around the need for the researcher to build a robust understanding of its complex philosophical underpinnings before embarking on its use. Whilst Creswell (2007) and Robson (2011) suggest this is a prudent step, Porter (a nursing researcher) claims that good practice in qualitative research is possible with a more simplified grasp of phenomenology:

> …it is possible to jettison the baroque intricacies of high phenomenology and just use its simple basic assumptions, without any significant compromise to the integrity of the research. …To my mind, its essence is about trying to uncover, and possibly explain, people's experiences of health, illness, and care.
>
> (Porter, 2008, p.268)

I believe that this study was influenced by phenomenology, as it aimed to identify the 'essence' of the experience of infant massage. Indeed, in the early stages of developing this project, I was convinced that it would have a phenomenological case study methodology, a fusion of the two methodologies. However, I believe this

study identifies most strongly with the case study methodology, which, in my view, despite varying interpretations, has greater specificity, and stronger boundaries. This is explored further in Section 3.3.2.

3.3.2 The case study approach

There is much debate around the identity of case study; Yin has variously described it as a research strategy (1981 and 2009) and as a method (2014), whereas Stake (2005) has defined it as pertaining to the selection of what is studied. Additionally, terms such as ‘case’, ‘case record’ and ‘case study’ are used to refer to documentation in fields such as medicine, social work, law and teaching (Yin, 2014). For the purposes of this study, and in agreement with researchers such as Creswell (2007) and Robson (2011), I understand case study to be a methodological approach or ‘strategy of inquiry’ (Denzin and Lincoln, 2011) which connects with the selected methods.

The key feature of case study methodology (and one that links it strongly to this research project) is its focus on either a single or small number of examples of a phenomenon (Denscombe, 2010; Robson, 2011). It also recognises the complex nature of the phenomenon (Stake, 1995; Denscombe, 2010; Yin, 2014), thus permitting an in-depth exploration, a key aim of this study. Furthermore, and in my view linking with the ethics of research, the case study approach investigates the phenomenon in the context of its naturalistic setting (Robson, 2011; Yin, 2014). I believe that this is usually less stressful for participants, and is an issue I highlight in the literature reviewed in Chapter 2. Other attributes of the case study approach are

its flexibility in terms of design (Robson, 2011), and the use of a range of methods, data types and sources (Creswell, 2007; Denscombe, 2010; Petty, Thomson and Stew, 2012). The range of methods enable the complexity of the phenomenon to be documented (Denscombe, 2010) and, I would suggest, contribute to triangulation and trustworthiness (this chapter, Section 3.5). Moreover, the methodology is usually relevant: 1. When the central research questions begin with 'how' or 'why' (Yin, 2014). 2. When the researcher has little or no agency in the situation under exploration (Denscombe, 2010; Yin, 2014). 3. When the phenomenon is current rather than historical (Yin, 2014).

One of the challenges associated with case study as a methodology is the definition of the case and its boundaries. What counts as a case can vary widely; it can be an individual, a group, or an organisation (Robson, 2011), as well as a teaching programme, or an entire country's schools (Stake, 1995). The case is, according to Stake (1995), tangible and boundaried, an 'integrated system' which fits best with people and programmes, and less so with events and processes. By contrast Yin (2014) recognises that the case is seen in its 'real-world' setting, so the boundary between phenomenon and context may not be easily identified. For the purposes of this study, I identified the 'cases' to be the three dyads who participated in the study; Families A, B and C. A further concern levelled at case study as a methodology is that the findings cannot be generalized. However, Denscombe (2010, p.53) suggests that the detailed examination of individual cases may shed light on the nature of broader human experience, claiming: *"The aim is to illuminate the general by looking at the particular."* Furthermore, Stake (1995) advises the researcher to resist the temptation to overstate interpretations of a relatively small

sample. Instead, we are encouraged to focus on case study as about 'particularization' rather than 'generalization'; on building a deep understanding of the case in its own unique right.

In Chapters 5 and 6 of this study, the narratives and case studies for Families A, B and C are developed. They include illustrative 'vignettes' (Stake, 1995) where short video excerpts and observations of interactions highlighting particular aspects of the families' massage experiences are described. Rather than considering generalizability, this study focuses on transferability (this chapter, Section 3.5), incorporating a small qualitative questionnaire phase into the methods (this chapter, Section 3.4.6). Lastly, the practicalities around this methodology must be considered, namely gaining access to the case study sites, and observer effect due to protracted engagement with the field sites and participants (Denscombe, 2010). In my view, both challenges can be addressed through a planned pre-fieldwork and engagement stage (Chapter 4) and through acknowledging and clearly documenting the subjectivity of the researcher.

3.3.3 'Is it action research?' Reflecting on action research, praxeology and appreciative inquiry

<u>Axiological influences – Appreciative Inquiry, Action Research and Praxeology</u>

Axiology, or values, is in my view a critical element infused throughout this research project. Lincoln, Lynham and Guba (2011, p.116) define axiology as *"…the branch of philosophy dealing with ethics, aesthetics, and religion…"*, and see it as embedded within our paradigmatic choices. I would agree with this; the process of

identifying and aligning oneself with particular paradigms, ontologies, epistemologies and methodologies has been in my experience an iterative and interconnected process as opposed to a linear one.

I have been influenced by the spirit and ethos of a number of practices; Appreciative Inquiry (AI), Action Research (AR), and, locating itself amongst the 'family' of AR practices, praxeology. Appreciative Inquiry is an affirmative practice used in organisational transformation; a 'strength-based' approach encouraging creativity and co-operation though participation (Bright, Cooperrider and Galloway, 2006). I was drawn to this approach by its collective intentions, and to its stance that affirmative questions can contribute to a positive environment, and to developing strong and respectful connections with others (Billings and Kowalski, 2008). Appreciative Inquiry, according to Bright, Cooperrider and Galloway (2006), recognises the organisational significance of positive relationships with others. They signpost us to Dutton and Heaphy (2003), who highlight the importance of 'high-quality connections'; working relationships that have an enhanced capacity to carry both positive and negative emotions: *"Like a healthy blood vessel that connects parts of our body, a high-quality connection between two people allows the transfer of vital nutrients; it is flexible, strong and resilient."* (p.263). This concept is of particular significance to this study, where the function of infant massage in relation to early dyadic communication is explored.

Action Research is a collaborative approach to building understanding that combines action, reflection, theory and practice. It is rooted in democracy, aiming to

develop knowledge through dialogue *with* people, and with the aim of locating grounded solutions to real world issues (Bradbury, 2015). This stance appealed to me; I believe strongly that our theories and interpretations through research should be translated into tangible resolutions which improve practice and services for children and families. I am also clear that we should work with an ethic of respect for research participants; they are co-creators of knowledge and, should they choose to be so, part of positive transformation. Indeed, in contrast to the 'Troubled Families' agenda and its stigmatisation of families facing challenge, AR posed a respectful alternative *"…because the nature of life, power, structural exclusion, and inter-generational injustice demands it."* (Bradbury, 2015, p.2).

There are many approaches that locate themselves in the action research family (Bradbury, 2015), and indeed, Boyd and Bright (2007) make the claim for Appreciative Inquiry as a form of AR. As I considered whether or not this research study identified as action research, I turned to the work of McNiff. Whilst it adheres to the principles of democracy, inclusion, and improving practice, McNiff (2010) views the approach as 'practitioner research', i.e. carried out by the practitioner within their own setting, and using cycles of action and reflection (McNiff and Whitehead, 2011). As a researcher who was external to the two participating settings, I was unable to enact these elements. However, McNiff's (2010) definition of action research resonated with me; an exploration of something close 'to your heart', and with the ultimate aim of improvement. I am a proponent of infant massage, and the aim of this study was to better understand the difference it made to families who faced challenging circumstances, and to share these findings with early childhood professionals and fundholders.

Praxeology

Praxeology is a participatory paradigm in early years research in which *"…reflection (phronesis) and action (praxis) done in conjunction with others…"* (Pascal and Bertram, 2012, p.477) occurs amidst a critical understanding of power (politics) and a heightened emphasis on values (ethics). These four central components interrelate to form the basis of a worldview which seeks to become more participatory and therefore more truly democratic. The development of this approach stems, the authors claim, from their own ongoing 'struggle' to make their work authentically participatory, and is documented in a paper focusing on research with young children (Pascal and Bertram, 2009). The theoretical and conceptual origins of this paradigm are traced back to von Mises' text, *'Human Action: A Treatise on Economics'* (1998), in which praxeology is defined as *"…the general theory of human action…"* (p.3), and its first use attributed to Espinas (1890). Furthermore, Pascal and Bertam (2012) attribute the 'long emancipatory history' in social science research which has inspired their work and shaped their paradigmatic stance. In their interpretation of praxeology, the observation of 'human action' in early childhood is no longer the preserve of 'expert elites', but one found through the multiple perspectives of young children and their families, professionals, decision-makers and researchers.

This approach to research resonates with me; ethically I believe that we should work in ways that respect and truly hear the wisdom and experience of children, families, and frontline practitioners. It needs to be a genuinely collaborative process, and one that understands and carefully balances the power dynamics that

may exist. Pascal and Bertram (2012) also set out the two-layered approach of praxeological research, with each approach having a specific objective: 1. To build understanding and action that is of practical use to people. 2. To 'empower' participants to pursue social change through the process of their own knowledge generation. This linked with my doctoral study, which aimed from the outset to work *with* participants, and to generate knowledge through affirmative practice which directly benefited families and practitioners. Moreover, it aimed to contribute a voice calling for change, and challenging worrying notions around deficit models and intervention.

Alongside the ethical strengths of the praxeological approach, we must also consider the challenges. Perhaps the greatest risk associated with this and other participatory approaches is around research 'robustness' and 'rigour'. This is a challenge that Pascal and Bertram (2012) are keenly aware of, recommending adherence to Lincoln and Guba's (1985) trustworthiness criteria, addressed in Section 3.5 of this chapter. Furthermore, whilst praxeological researchers may incorporate both traditional and creative methods into their studies, with this comes a risk that less conventional approaches will be perceived by wary critics as 'soft' research. I would counter this assertion with the claim that through more creative approaches, such as video, photography, storyboarding (Sections 3.4.2 and 3.4.5) and other arts-based techniques, we open up research to include a greater range of voices. Indeed, as Krueger (1998, p.71) points out, through the exclusive use of more conventional techniques we are denying a voice to some*: "…the answer cannot be shared because it is below the level of articulation. Although participants may have feelings about the topic, they cannot express them in words."*

Practically speaking, praxeology and other forms of action research often require significant amounts of practitioner time (Reason and Bradbury, 2008; Pascal and Bertram, 2012) and tend to focus on smaller numbers of participants, leading to concerns regarding transferability (Pascal and Bertram, 2012). In this study, flexible pre-fieldwork and fieldwork stages were designed to permit a more sustained engagement (Chapters 4 and 5), as well as a questionnaire phase (this chapter, Section 3.4.6) which began to address the issue of transferability.

3.3.4 'Attached research' – the considerations

'Reflexive attached commitment'

Whilst considering the methodologies and methods most suited to answering the questions in this study, it was important to contemplate the nature of research relationships with prospective participants. The study aimed to develop intimate portraits of families' experiences of infant massage and the unfolding infant-carer relationship; therefore careful reflection around developing trusting relationships was required. In their article 'Towards a social science of the social: the contribution of praxeological research', Formosinho and Formosinho (2012) introduce the concept of 'reflexive attached commitment', which is, they claim, a key component of praxeological research. This 'attached' position is developed over time, and is closely connected, responsive and empathetic for and towards participants and context. Furthermore, and counter to the beliefs of some that the positivist tradition is the sole source of reason, this position may facilitate a new *"…rationality of listening and care…"* (p.602), permitting a deep explication of the phenomenon under examination.

Having worked in children's centres, where collaborative partnerships were key to effective engagement with families and aligned agencies, I identified strongly with the concept of reflexive attached commitment. I understood that I would be asking families to work with me at a very special and sensitive time in their developing relationships. It was also interesting to note the isomorphism between the principle of attached research and this study, where attachment relationships through infant massage would be explored.

However, I was also aware of the risk that an attached working relationship could be misinterpreted as friendship by potential participants. It was critical that clear professional boundaries were maintained, in accordance with the European Early Childhood Education Research Association (EECERA) 'Ethical Code' (2014), and the University of Wolverhampton Research Policy Unit's 'Ethics Guidance' (2015a) and 'Human Participants' (2015b) online documentation. To safeguard this, I maintained a detailed record of all fieldwork activity in reflective journals and field diaries, which included home visits, decisions, and ethical puzzles. Additionally, the fieldwork was overseen by a team of experienced supervisors, with whom I had weekly email contact and monthly supervisory sessions. Furthermore, initial contact with families was made through joint home visits with infant massage facilitators, and subsequent early communication went through them. Ongoing contact with participant families was carried out via my university email address, and phone contact made through a project mobile phone. This is explored further in Chapter 4, Section 4.2.5).

As I made early visits to centres where an interest in participating in the research had been expressed, I came to appreciate that a trusting attached working relationship would need to be developed with the staff team. In particular, the infant massage facilitators who were gatekeepers to the fieldwork stage would need to appreciate and see the need for the study (Chapter 4).

3.3.5 Naming the methodological approach used in this research: What kind of study is this?

This study takes influence from action research, appreciative inquiry and phenomenology, and I describe it as a 'praxeological case study'. As a case study its main focus is on a small group of examples of the phenomenon (Denscombe, 2010; Robson, 2011), which are recognised as complex (Stake, 1995; Denscombe, 2010; Yin, 2014), and are examined in detail. Praxeology permeates throughout the study where reflection (phronesis) and action (praxis) *with* others occurs amidst a critical understanding of power (politics) and a heightened emphasis on values (ethics) (Pascal and Bertram, 2012).

3.4 Identification of the methods best suited to getting close to the data

3.4.1 The research design

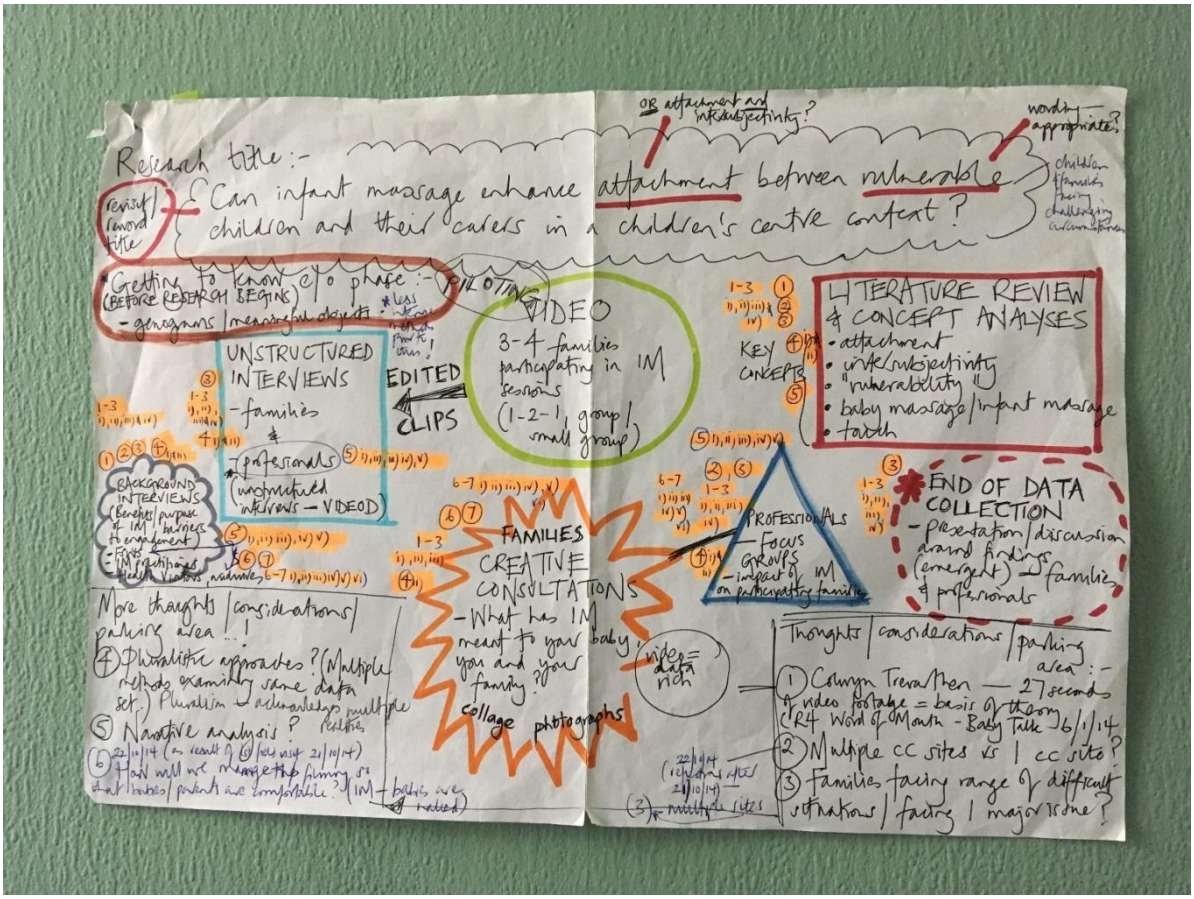
The research design is variously described as the *"…framework or plan to guide research activity. …"* (Robson, 2011, p.532), the 'logic' connecting the data to the research questions (Yin, 2014), and a 'flexible' guide linking theoretical paradigms to strategies of inquiry, and then to research methods (Denzin and Lincoln, 2011). I

found Robson's (2011) conceptual and diagrammatic representation of what constitutes a research design particularly useful as it identifies five interconnected key elements. These are: 1. The 'purpose(s)'; the overarching aims of the study (Chapter 1, Section 1.3.2). 2. The 'conceptual framework'; the researcher's theories of what is occurring within the investigation, and how these theories may be connected (Chapter 2, Section 2.5). 3. The 'research questions'; the specific questions the study seeks to answer (Chapter 1, Section 1.3.3). 4. The 'methods'; identification of the techniques to 'collect data', assure 'trustworthiness', and the approaches to data analysis (Chapter 3, Sections 3.4 and 3.5, Chapter 6, Sections 6.2 and 6.3). 5. The 'sampling procedures'; a consideration of the equilibrium between purposeful selection and the data needed. They also suggested reflection around where, when, and from whom the data would be sought (Photograph 1, which follows).

Linguistic issues

Whilst I agreed with Robson's conceptualisation of the research design, and used it to build this project, I was not comfortable with the use of phrases such as 'collect data'. I believe that these linguistic choices position research participants as submissive in the process, which does not fit with the constructivist paradigm and praxeological approach to participants as co-constructors of knowledge (Chapter 3, Sections 3.2 and 3.3.4). In response, I developed the term 'data generation' as I felt this more effectively described the approaches used in this study. I later discovered that other researchers held similarly strong views around the language of research; as I began the write up phase of this study, I located a writing guide by Thomson and Kamler (2016, p.134) stating: *"We generate the data, not collect it."*

Photograph 1 – Connecting the research questions to the methods and data sources

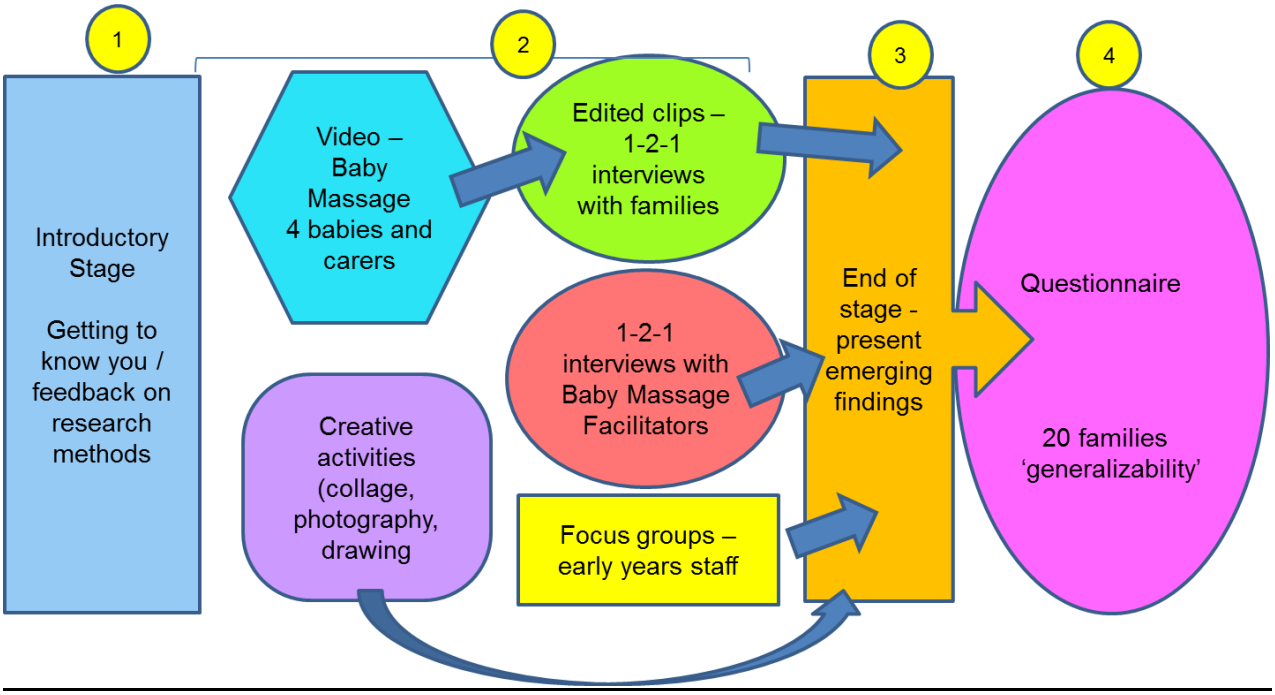


Developing the research design and strategy

In developing the research design, and inspired by the effective use of diagrammatic representation to convey the key elements of the 'Effective Provision of Preschool Education (EPPE) Project' (Siraj-Blatchford, Sammons, Taggart, Sylva and Melhuish, 2006), I constructed a diagram (Photograph 1, previous page) which connected up: 1. The research questions. 2. The potential 'data sources' offering answers to these questions. 3. The methods likely to support 'getting to the data'. This task encouraged me to apply focused consideration to *where* the data might be located and *what* methods would assist us to get close to this. In my opinion, potential data sources included participants (babies and carers, and early years practitioners), as well as literature in the form of journal articles and key texts. The methods that I believed were most likely to support a deepened understanding of the practice of infant massage, and to answer the research questions were video (Section 3.4.2), interviews (Sections 3.4.3 and 3.4.4), creative activities (Section 3.4.5), alongside literature reviews and concept analyses (Chapter 2). The anticipated research methods are visually represented in Diagram 1 which follows.

Having considered Robson's (2011) identification criteria, I selected a flexible qualitative design strategy as opposed to a fixed quantitative strategy (where detail of the research design is pre-determined) or multi-strategy design (combining fixed and flexible elements). The study was exploratory and evolving, was likely to generate qualitative data, anticipated using a praxeological case study methodology, and had 'What?', 'How?, and 'Why?' research questions, so the flexible design seemed the best fit.

Diagram 1 – The anticipated research methods



3.4.2 Video

There is a long tradition around the use of film and photography in the documentation of human life; Marshall and Rossman (2011, p.183) trace its history back to *"…visual anthropology or film ethnography, where interactions and activities were systematically recorded to depict a cultural group or event."* Furthermore, film and photography are now used across a range of academic disciplines as data sources and as modes of representation of findings (Marshall and Rossman, 2011). This practice has been instrumental in developing our understanding of the rituals and traditions of diverse cultures and societies around the world. Indeed, video, the first method in this project, was selected with aligned intentions. The study aimed to develop a deep understanding of infant massage as experienced by participant families, necessitating some form of fine-grained observation. The early stages of my thinking around the anticipated strengths and limitations of quantitative and qualitative methods with regard to getting close to the data, and guarding against selecting methods that were of personal interest were recorded as follows:

> …if we are to explore emotions in this study, then we need to use more flexible and creative methods. Quantifying is not going to unearth anything new. The challenge: 1. Using creative methods, only if it fits the needs of the participants (should not be an indulgence for me). …
>
> Rouse, 25/06/14, Professional Reflective Journal

Whilst beginning the literature reviews linked to the five key concepts of the project, I located the work of Colwyn Trevarthen, a key researcher in the field of intersubjectivity (Chapter 2). Trevarthen has made extensive use of video in studies with young babies and their families, and I was fortunate to arrange a meeting with him, at which he shared some video excerpts. The footage highlighted the 'communicative musicality' (Trevarthen and Malloch, 2002) between the infant and carer, as well as subtle facial expressions and physical gestures. This was a pivotal session for me, as the example videos suggested that a detailed examination of the infant massage experience could be achieved through this method. Indeed, Marshall and Rossman (2011) state that video has a particular facility for chronicling behaviours that are 'nonverbal', such as facial expressions, signs of emotion, and physical gestures.

As I began to foreground the use of video as a viable method, I examined its use in an international research project; 'Children Crossing Borders' (Tobin, Mantovani and Bove, 2010). Video was edited to produce a narrative of a 'typical' day in a preschool setting in each of five participating countries. The edited videos were then used as focus group discussion prompts with parents and pre-school teachers around the theme of the early learning experiences and care of young children. Tobin, Mantovani and Bove (2010) stated that the video assemblages were *not* the data sources; the data emerged from the discussions stimulated by the films. Furthermore, the claim that video can provoke a complex array of emotional, sensory and intellectual responses (Tobin, Mantovani and Bove, 2010; Marshall and Rossman, 2011) seemed to fit well with an exploration of infant massage; a multi-sensory and shared infant-carer experience incorporating the physical act of

massage with oil, and focusing on connection and communication. Tobin, Mantovani and Bove (2010) also posited the view that participants respond to video in a number of ways; to the story the film and characters tell them, and to the experience of watching in dialogue with others. At other times, the film initiates accounts of personal experiences. My experience of early co-interpretation of film footage with participant families supported this assertion; focused discussion around the footage naturally gave way to broader reflections around the themes. For the purposes of this study, I decided that the video produced would act as a data source documenting child-carer interaction *and* as a stimulant (Rouse, Professional Reflective Journal, 2014).

In coming to a balanced decision around the use of this method, it was important to consider both its strengths and limitations. Whilst film and photography have the capacity to document the detail of human experience, the reverse of this with regard to this study was the potential for intrusion, feelings of self-consciousness, and interruption of the natural behaviours of participants. Countering this, Jordan and Henderson's (1995) discussion of 'camera effects' claims that research participants usually acclimatise to the camera's presence relatively quickly, even in sensitive situations such as the birth of a baby. This, they state, occurs particularly when they are deeply involved in an activity and there is no-one operating the camera. Additionally, they suggest that engagement with the camera operator and visual contact with the camera can be seen as indicators that the peak of focused activity has ended, a time when people will *"…orient to the periphery…"* (p.55)

Another of the strengths of video is that it can document occurrences that are 'unique', 'disappearing', or 'rare' (Marshall and Rossman, 2011). This anthropological perspective is an interesting point; one might contend that the child-carer interaction through infant massage is unique as it is likely to be very individual to each dyad, potentially disappearing as it occurs at particular point in the infant-carer relationship, and rare as it is not a universally offered experience. However, it is also important that we do not view video as an objective method; Marshall and Rossman (2011) warn against the apparent neutrality of films and photographs, which, like other modes of observation, are imbued with the perspectives of the researcher. To guard against this, they recommend inviting participants to share their readings of the data to confirm researcher interpretation. My study has taken this principle to a deeper level, aiming for equality in the research relationship by positioning participants as co-interpreters of the video footage (Chapter 6).

Video, like all methods, has an inherent set of benefits and challenges, many of which have been discussed in this section. To offset the risks, I maintained detailed field diaries and professional reflective journals throughout the project, accessed guidance from an experienced film professional with expertise in work with children and families, and carried out test filming with lead practitioners at both participating sites (Chapter 4). Furthermore, I addressed the ethical challenges in a detailed application for ethical approval (this chapter, Section 3.7.1), and worked with participating families to agree sensitive protocols around starting and stopping filming in response to infants' and carers' cues.

3.4.3 Individual interviews – families and practitioners

Types of interviews

Interviewing was identified as a potential method for this study, as I anticipated that it would support families and practitioners to reflect deeply on the infant massage experience. There are three main types; structured, semi-structured, and unstructured. The structured or standardised interview has pre-planned questions with set wording, usually in a fixed order (Robson, 2011). The intention here is that participants are offered identical interview prompts, and a pre-set range of answers are commonly used (Bryman, 2012). Semi-structured and unstructured interviews are the two main types of interview used in qualitative research (Bryman, 2012).The former uses an 'interview guide'; a checklist of main themes to be discussed, wording and order, but with the expectation that this will be adapted in response to the participant's responses (Robson, 2011). The latter can again make use of a checklist of themes (Bryman, 2012), and can be more informal, allowing the conversation to develop naturally (Robson, 2011).

Selection of interview types

Whilst there are identifiable strengths associated with structured interview methods, including the standardisation associated with the fixed nature of the approach, this study aimed to develop a deeper understanding of the infant massage experience from the perspectives of the participant families and early years staff linked to the service. This necessitated the selection of less structured interview approaches that elicited 'rich' responses, allowing themes that were important to participants to

emerge (Bryman, 2012), and offering flexibility (Robson, 2011; Bryman, 2012). Semi-structured and unstructured interview approaches would also permit the researcher to follow up on unexpected or intriguing responses, and to attend carefully to participants' non-verbal behaviours, providing a level of detail unattainable in questionnaire-based approaches (Robson, 2011).

It was also important to consider the potential challenges associated with interviewing, particularly for a learning researcher. Roulston, deMarrais and Lewis (2003) found that less experienced interviewers experienced challenges including unanticipated participant behaviours such as lateness, environmental disruptions such as noisy rooms, and the effects of researcher bias which became apparent when reading back transcripts. Additionally, keeping the interview focus, asking follow-up and clarification questions, and dealing carefully with sensitive issues were additional pressures. Interviewing also requires a considerable investment of participant and researcher time (Robson, 2011), including time-consuming transcription procedures (Roulston, deMarrais and Lewis, 2003; Robson, 2011; Bryman, 2012), and the need to remain cognisant that excessive time demands may affect participant engagement (Robson, 2011). Lastly, and counterbalancing the central strength of flexibility is the opposing argument that the absence of standardisation calls into question the 'reliability' of the approach (Robson, 2011).

There were undoubtedly a number of challenges to consider in relation to this method, and as documented in Chapter 5, I faced many of the environmental and participant issues described by Roulston, deMarrais and Lewis (2003). However,

the possibility of generating detailed accounts of the experience, a key aim of this study, offset the potential challenges around this approach. Furthermore, maintaining scrupulous documentation of the research process, decisions and ethical issues through field diaries and reflective journals would offset potential concerns around the 'reliability' of the method.

Participant families

It was anticipated that the interview work with participant families would be linked to the co-analysis of their infant massage videos and creative activities (Chapter 5, Sections 5.3.6 and 5.6) and would therefore be a blend of the unstructured and semi-structured approaches, conducted over a series of sessions, and using small sets of pre-planned prompt questions, general discussion themes, and unstructured discussion opportunities. The use of videos as discussion starters with small groups of participant families and practitioners was a technique used by Tobin, Mantovani and Bove, 2010), and in an early visual representation of the methods (Photograph 1) I considered this as a potential approach. However, I was also aware that the experience of infant massage was likely to be very personal for participating families, and that some carers may not feel comfortable to share their reflections with other participants.

Indeed, in a statistical analysis of the incidence of sensitive issues being broached by participants of individual interviews as opposed to focus groups, Kaplowitz (2000) found that individual interviews were*: "…eighteen times more likely to raise*

socially sensitive discussion topics than the focus groups. …" (p.419). Ultimately, I would need to work in a flexible and responsive way, led by participants' preferences with regard to small group or individual interviews.

Practitioners

In the early stages of the design of this project, I had anticipated that participating infant massage practitioners would be involved in the focus groups (Section 3.4.4) alongside other early years staff. However, through discussions with my supervision team, it was agreed that the depth of the infant massage practitioners' experience may be lost in a group setting. I decided that it would be more effective to interview infant massage facilitators on an individual basis. The interviews with the children's centre infant massage practitioners were proposed as individual and semi-structured, with a set of questions to be posed in a flexible order, and allowances made for additional unplanned follow-up questions (Appendix 4). The questions were then adapted for interviews with an independent infant massage facilitator (Appendix 5) and a holistic therapist and cultural practitioner of infant massage (Appendix 6).

3.4.4 Focus group interviews

The research project aimed to include and respect the diverse perspectives of a range of families and practitioners, linking with the constructivist paradigm of the study, as well as Principle 4 of the 'EECERA Ethical Code for Early Childhood Researchers' (2014, p. 3): "*Knowing from multiple perspectives."* Madriz (1997) views focus groups and in-depth interviews as 'complementary'. I anticipated that

group interviews would be an effective and efficient way to hear the views of groups of practitioners involved in the wider ideology behind offering infant massage as a service, as well as key agencies supporting families to engage. This would provide an important wider context for the service in addition to the deep interview discussions with families and infant massage practitioners.

What is a focus group?

The use of focus groups began in the field of market research in the 1920s (Robson, 2011) and is a term often used interchangeably with 'group interview' (Robson, 2011; Bryman, 2012). However, Bryman (2012) clarifies that the focus group is a hybrid of the group interview (in which a group of participants address several topics) and a 'focused interview', where individuals have been identified due to their experience of a specific situation (Merton, Fiske and Kendall, 1990). The focus group method then adds to this blend an 'interaction' between participants, and concentrates on a singular theme (Bryman, 2012), hence the term 'focus' (Robson, 2011).

Focus groups – strengths, limitations and considerations

Alongside the more obvious efficiencies afforded through interviewing a number of participants in a group setting (Robson, 2011), there are also claims that the group enables the researcher to find out why people hold certain beliefs; group participants may challenge and explore each other's positions (a process that does not usually occur in individual interviews), and individuals can adopt new

perspectives as a result of listening to others (Bryman, 2012). This ameliorating force is thought to counteract the risk that more 'extreme views' may be presented (Robson, 2011) as group debate may allow the researcher to develop a more representative view of participants' perspectives (Bryman, 2012). However, Barbour (2007) warns new focus group facilitators that it is: *"…important to acknowledge the propensity of groups to elicit 'horror stories'. …"* (p.82). There is, Barbour claims, a tendency for participants to present increasingly far-fetched accounts as they attempt to surpass the narratives offered by other members of the group. It would seem that the focus group has the capacity to both regulate and exacerbate the perspectives shared.

The group setting also facilitates a foregrounding of the issues and themes that participants see as significant (Robson, 2011; Bryman, 2012), allowing the researcher to assess levels of consensus (Robson, 2011), as well as drawing out a wide range of opinions around the discussion theme (Bryman, 2012). Alongside this, the group format means that participants can decide not to join discussions around some of the questions, allowing them to maintain a level of privacy (Barbour, 2007), and, through the group dynamic, steer the focus of the session (Wilkinson, 1999; Barbour, 2007). Furthermore, it is considered an inclusive approach, as it does not require specific literacy skills, and may engage individuals who feel they have little to contribute or are unwilling to be interviewed individually (Kitzinger, 1995).

However, we must also consider the risk that the group environment can lead to power struggles between participants, requiring considerable facilitator skill (Robson, 2011). Indeed, in my opinion, it is critical that we consider how we intend to facilitate focus group sessions; the facilitator's role is to 'guide' the activity without interfering (Bryman, 2012), which can be a difficult concept for a new researcher. Furthermore, careful consideration needs to be given to the design of the questions, which need to be clear and concise, developed over time with others, and conversational in tone (Krueger, 1998). Logistically, recording equipment, note-taking arrangements, and the use of stimulus materials such as photographs and newspaper articles as icebreakers and discussion starters also need to be considered (Barbour, 2007).

I decided that if, as was claimed, the *"…synergistic potentials…"* of focus groups had the potential to *"…yield particularly powerful knowledges and insights."* (Kamberelis and Dimitriadis, 2011, p. 559), it provided an important opportunity to generate new understanding around the value of infant massage as a service. This outweighed my concerns regarding the time required to co-ordinate and prepare for the session, as well as my yet untested skills in facilitating the focus group dynamic.

3.4.5 Creative activities

The aim of this study was to develop a deeper understanding of the infant massage experience, and the difference it made to families who faced challenging life circumstances. I anticipated that the experience was likely to be multi-faceted, and may require some innovation in the identification of methods that would support

families to describe their experiences. It was my view that more traditional techniques, such as structured and semi-structured interviews and questionnaires would not provide a sufficient range of expression to support Families A, B and C to describe a potentially complex experience.

Whilst exploring approaches to facilitating focus groups, I located some guidance around ‘projective questioning’, a suggested technique used with focus groups where participants are initially asked to explore a different and apparently less challenging theme, before moving on to the primary theme (Krueger, 1998). I was interested by the suggested techniques, including sentence completion, collage, pictures and analogies. Krueger (1998) claimed that these techniques could bypass expressive barriers, such as emergent ideas, or editing of responses due to fear of judgement. It was also stated that the techniques address a human tendency to limit thinking and responses to either the left or right side of the brain, encouraging instead the use of many domains, and thus facilitating multiple forms of expression.

It was my intention, and a component of this ethical praxeological case study, that the methods were inclusive, supporting participants to describe their experiences in a range of ways, to use the techniques to crystallise their thoughts, and to have the opportunity to highlight aspects of the infant massage experience that were difficult for them. I began to consider using arts-based techniques to support Families A, B and C to describe their infant massage journeys. Kara (2015a) suggests that amongst their attributes, they are particularly suited to the exploration of ‘sensitive topics’, as well as working with children, participants with additional needs, and with

individuals with diverse cultural and linguistic backgrounds. I viewed infant massage as a potentially sensitive experience, relating to an important and emotional time for the infant and carer.

There is much debate around the use of arts techniques in research, with some believing that researchers should have a level of proficiency in their selected art forms akin to their research skills. Others take a more pragmatic view that any arts-based method can be used provided it is appropriate to the study (Kara, 2015a). I take the latter view, believing that the critical aspects are an understanding of the possible strengths and challenges associated with the technique, and an expectation that it will enable us to get close to the data. However, I was also aware that having studied art at school and university, I had a predisposition towards visual and arts-based methods. It was important that the selected techniques were adaptable, and that families did not feel obliged to participate if they were not comfortable to do so.

I began to consider collage as a potential method to scaffold families' reflections around infant massage. The technique can include the use of images and photographs from diverse sources including magazines, catalogues and online databases, meaning that participants would not need to possess particular drawing or crafting skills. I anticipated that this would alleviate potential fears associated with arts-based techniques. I also benefited from specialist guidance from a researcher at my university, Dr Vinette Cross, who talked through the practical

considerations of using storyboarding in research work, and suggested some further reading.

Storyboarding or ‘story mapping’ is a technique where ‘scenarios’ are visually depicted, and can be used as a stimulant for discussion and to support individuals to share experiences (Ureda *et al.*, 2011). Whilst pre-prepared story maps were used to support African American and Hispanic men to discuss decision-making around prostate cancer screening in Ureda *et al*.’s (2011) study, I anticipated that families could develop their own story maps describing their infant massage experiences, and, as with the video footage (Section 3.4.2) they would be both data sources and starters for participant-led discussions. A similar concept, ‘theme boards’ encouraged participants to make explorations of feelings, thoughts and ideas through visual imagery (Parsell, Gibbs and Bligh, 1998). This was of interest, particularly as it claimed to support visual expression when verbal communication could be more challenging. Indeed, Gauntlett (2007) suggests that we adopt research practices that allow participants time to reflect, to engage in making artefacts, and that do not expect immediate answers to questions or expression through language. Time and reflection are important elements considered in Section 3.7.2, where a matrix of approaches to informed consent is presented.

However, it was also important to acknowledge that an arts-based approach could risk making participants feel uncomfortable, as they would be asked to explore and portray feelings and thoughts that they may not feel happy to share. To guard against this, activities were planned to fall towards the end of the fieldwork, allowing

time for the attached research relationship to develop, to establish a clear respect for participants' rights to withdraw from any part of the study, and to allow time for any creative interests to come to the fore. Furthermore, extended time for participants to reflect on what to share, and to create their artefacts was built into the fieldwork (Chapter 5, Section 5.6). Indeed, in a discussion of symbolic constructionism, a research approach using arts techniques to understand human experience, and an intersubjective participant-researcher approach to knowledge creation, Barry (1996, p.2) states that it aims to offer *"…richer, less reductive understandings of human beingness. …"*. This was a central aim of this research, and it seemed, on balance, that the sensitive use of arts-based techniques would offer an opportunity for families to articulate their individual infant massage journeys.

3.4.6 Questionnaire phase

The final element of the anticipated fieldwork activity was a questionnaire phase. The aim of this was to begin to address the criticism that can be levelled at the case study approach; lack of 'generalizability'. Whilst this small-scale study would not make this claim, the questionnaire phase aimed to provide an opportunity to explore the 'transferability' (Lincoln and Guba, 1985) of the experiences of Families A, B and C to a wider group of participant families. Transferability is one of the four elements which, according to Guba and Lincoln (1985), contributes to trustworthiness, and is discussed in Section 3.5.

The term ‘questionnaire’ can be used to refer to self-administered and postal questionnaires as well as to interview schedules (Aldridge and Levine, 2001; McLean, 2006). For the purposes of clarity, in this study the term is used to refer to the questionnaire developed to engage with a wider group of families who were experiencing challenging life events (Appendix 7). There are a number of ways that questionnaires can be completed; self-completion via post, email, in person and ‘on the spot’ (Aldridge and Levine, 2001), interview-based questionnaires and telephone surveys (Robson, 2011).

This study aimed to work in response to participants’ wishes and preferences, so the questionnaire developed needed to be adaptable to self-completion and researcher or practitioner-completion options. It was also important to consider the strengths and limitations associated with the use of questionnaires. As a data generation method, self-completion questionnaires are usually relatively low cost in terms of copying and distribution, and can be quickly shared with and completed by a large number of participants (Aldridge and Levine, 2001). Furthermore, data can be scanned or manually entered into a computer, and analysed using statistical packages, saving the researcher time and supporting the identification of relationships between variables (McLean, 2006). Where the researcher has not had direct contact with the participant, the issue of interviewer bias is not thought to be a concern (Aldridge and Levine, 2001; McLean, 2006), and there is the potential for individuals across a wider geographical area to participate (Aldridge and Levine, 2001). Furthermore, and of particular interest to this project, there is much debate around whether more sensitive questions should be asked in person or via self-administered methods, with data suggesting that the latter approach is most

effective (Fowler Jr., 2014). My view is that the in person approach is effective after an attached working relationship has been established (Section 3.3.4), and that we need to remain flexible around methods with participants with whom we have yet to establish a connection.

Other factors that must be considered in relation to this method are low response rates, particularly in relation to postal questionnaires, and consequently the concern that those who have participated do not represent the population group (McClean, 2006; Robson, 2011). Furthermore, individuals who face literacy issues may not feel able to participate (Aldridge and Levine, 2001). Another major criticism of the questionnaire method is that it *"…cannot capture the true extent of a social phenomenon. Reality, according to this argument, is much more complex than the few variables that are found in a questionnaire."* (McLean, 2006, p. 253). However, this study aimed to explore the complexity of the phenomenon of infant massage through the cases of Families A, B and C, and a broader view of families' experiences through the questionnaire phase. Lastly, and critically, the types of questions used must be carefully considered. The researcher must have a good understanding of the topic in order to develop effective questions (McLean, 2006) and should ensure that language is simple, questions short, and avoid leading the participants (Robson, 2011). Furthermore, the use of open and closed questions should be considered (Fowler Jr., 2014).

In response to these considerations, and heeding Robson's (2011) advice that one should limit the number of open questions, I designed a short questionnaire. This

contained five open questions, aiming to elicit families' individual experiences of infant massage and their views around the benefits and challenges associated with the service. Whilst Fowler Jr. (2014) suggests that closed questions are a more 'satisfactory' data generation method, with questions more reliably answered by participants, and answers more easily recorded against the options provided in computerised data collection programmes, I did not want to select a method on the basis of convenience. Although the difficulties around analysing answers to open questions (Robson, 2011) must be acknowledged, there are a number of benefits. These include 'unanticipated' answers, the possibility that responses may more closely describe participants' experiences or beliefs, and the opportunity to express these in their own words (Fowler Jr., 2014). It was anticipated that the wider group of participant families would be identified by practitioners at Sites 1 and 2. Those families willing to participate would then decide how the questionnaire would be completed; either via self-completion, or through a dialogue with the researcher or infant massage practitioner.

3.5 Reflexivity and trustworthiness

Reflexivity

Reflexivity pertains to the researcher's critical awareness of their subjectivity and influence with regard to the research process; of 'human as instrument' (Guba and Lincoln, 1981). According to Finlay and Gough (2003, p.ix): *"The etymological root of the word 'reflexive' means to 'bend back on oneself'. …"*, implying a capacity for unflinching self-examination. Indeed, reflexivity is an important aspect of action research, where distinct cycles of action and reflection occur. The researcher's

recognition of their 'impact' on the research context, and the effects of the changes made through these cycles are critical (Bradbury-Huang, 2010). Lincoln, Lynham and Guba (2011, p.124) conceptualise reflexivity as a duality where the researcher is both *"…teacher and learner, as the one coming to know the self within the processes of research itself. …"*. This aligns with Reinharz (1997) who suggests that in addition to bringing ourselves to the field, we 'create' an identity influenced by the setting, participants' interactions with each other, and with the researcher's 'selves'. It is claimed that the qualitative tradition has a particular enthusiasm for the concept of reflexivity, as through its use the challenges associated with subjectivity can be reframed as assets, and linked more effectively with trustworthiness (Finlay and Gough, 2003).

The notion of acknowledging the self as both influencing and influenced by the research process is an interesting idea, and this study aimed to recognise, document and explore these elements. At the project outset, I decided to maintain detailed professional reflective journals and field diaries, recording my reflections, observations and decisions. These documents would also contribute to two elements of Lincoln and Guba's (1985) trustworthiness criteria; 'transferability' (through 'thick description' [Geertz, 1973]) and 'confirmability' (through reflexivity).

Trustworthiness

Trustworthiness is a concept presented by Lincoln and Guba (1985, p.290) as tracking back to one simple question: How can the researcher convince others (and

themself) that their findings are worthy of attention? Essentially, they are questioning how we ensure that our research is robust enough that we have confidence in it. Lincoln and Guba (1985, p.43) suggest that in the case of qualitative inquiry, the researcher addresses four key criteria; *"…credibility, transferability, dependability, and confirmability…"*, which are naturalistic equivalents to internal and external validity, reliability and objectivity. Although positivists may struggle with the concept of trustworthiness as it does not tackle the issues of validity and reliability in conventional ways (Shenton, 2004), I believe that it offers a strong framework through which we can assure the quality of our work. Each of the four key criteria are supported by identified activities, and summarised in Table 2 (next page), alongside how they were addressed in this doctoral study:

Table 2 – Trustworthiness and this doctoral study

Criteria and meaning	Activities supporting criteria	How was this achieved in this study?
Credibility The researchers establish reader confidence that a 'true picture' of the focus of the inquiry is being provided (Shenton, 2004). This 'crucial' criterion can only be effectively achieved through referring to the data sources (Lincoln and Guba, 1985).	*"…prolonged engagement, persistent observation, and triangulation…negative case analysis…referential adequacy…member checking…"* (Lincoln and Guba, 1985, p.301)	Extended engagement and research activity with families and field sites. Triangulation of participants, methods and data sources. Highlighting contradictory data and analysis alongside congruence. Checking out emerging themes and interpretations with participants (families, practitioners).
Transferability Enough contextual detail is provided for the reader to make an assessment of 'fittingness' to other contexts (Lincoln and Guba, 1985).	Provision of 'thick description' (Geertz, 1973).	Detailed contextual descriptions of participating sites, families, and fieldwork activities.
Dependability The study could be replicated by others, but would not necessarily produce the same results (Shenton, 2004).	An 'independent audit' to ensure that the inquiry adheres to professional practice requirements, and that output is linked to the 'raw data' (Lincoln and Guba, 1985).	Detailed description of the fieldwork activities recorded in field diaries and thesis, barcoding of data sources to provide clear links between analysis, interpretation and data. Annual Progress Reviews, scrutiny of thesis and viva voce examination as forms of independent audit.
Confirmability The qualitative equivalent of objectivity, where the researcher aims to ensure that the project findings are distilled from the participants' contributions as opposed to researcher 'predispositions' (Shenton, 2004).	Confirmability audit', 'audit trail', 'triangulation', 'reflexivity' (Lincoln and Guba, 1985)	Audits as listed above. Detailed professional reflective journals and field diaries documenting fieldwork activity, research decisions, and emerging themes. Observer triangulation (participating families, practitioners, supervisory team) and theoretical triangulation. Reflexive journal and field diary entries.

I am of the opinion that this study adhered strongly to the Lincoln and Guba's (1985) 'trustworthiness' criteria, aside from their recommendation that the researcher carries out 'referential adequacy' checks. This is a procedure where early findings and interpretations are checked against a portion of archived 'raw data' in an attempt to 'test' them out. Whilst I appreciate that this technique could address criticisms around lack of objectivity, it was my view that it was unethical to generate data with participants with the prior aim of archiving a proportion of this.

Whilst Lincoln and Guba's criteria provides, in my view, a robust framework for ensuring qualitative research trustworthiness, it is also important to acknowledge Tracy's (2010) point that there is a large range of criteria and literature relating to 'qualitative excellence', likely to confuse beginning researchers. This broad assortment may well indicate the challenges that qualitative researchers have faced around acceptance of their work (Seale, 1999). In a rationale for what is claimed as 'markers of quality' for qualitative research, Tracy (2010) states three central aims: 1. Pedagogy; to support students to understand and practice excellent qualitative research. 2. To build a respect for qualitative research methods amongst those in positions of power who may know little about this tradition. 3. To encourage dialogue and unity amongst qualitative researchers from diverse paradigms. I agree with these aims; we must always strive to make our work more comprehensible and therefore accessible, and we must collaborate with our colleagues to encourage decision-makers to see the contribution that qualitative studies can make to understanding the challenges we face as a society.

Tracy (2010, p.837) sets out the eight "big-tent" criteria as *"…(a) worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence."* Whilst I agree that they are concisely and clearly articulated, which is a contribution to accessibility in itself, I would suggest that there is considerable congruence with Lincoln and Guba's (1985) trustworthiness criteria. For example, 'rich rigor' is specified thus:

> Rich rigor The study uses sufficient, abundant, appropriate, and complex
>
> - Theoretical constructs
> - Data and time in the field
> - Sample(s)
> - Context(s)
> - Data collection and analysis procedures
>
> (Tracy, 2010, p.840)

In my view, this overlaps with techniques associated with confirmability (theoretical triangulation), credibility (prolonged engagement, persistent observation, triangulation of participants, sites, and methods). However, there are some interesting elements, particularly the 'ethics' strand. According to Tracy (2010), ethical considerations include 'procedural' (secure data storage and possible consequences of participating), 'situational' (recognising the individuality of each context, and reflecting constantly on the ethical challenges), 'relational' (researcher awareness of their capacity to influence others, and establishing respectful

‘reciprocity’), and ‘exiting’ (leaving the field and sharing the findings) considerations. I believe that this doctoral research project, a praxeological study, kept ethical work at its core, and paid careful attention to all four aspects of the trustworthiness criteria.

3.6 Peer scrutiny and feedback – a continuous process

Alongside the use of journals and field diaries as critically reflective and reflexive tools, this study invited questioning and developmental feedback throughout its lifespan. I worked closely with participant families, practitioners, a ‘peer reference group’ (two colleagues who were experienced researchers and parents of young children), and my supervision team. Examples of this approach which, I believe, strengthened the project, are described in Table 3 (following page):

Table 3 – Peer scrutiny and feedback

What did the feedback relate to?	Individuals approached	Feedback / suggestions offered
Draft versions - 'Information for Participants'	Peer reference group Potential participant family	Break information into smaller sections to support discussion, remove list of potential challenges (could create a barrier for families). Use of contrasting background made text more readable.
Proposed methods	Practitioners and leadership team – potential sites Potential participant families	Methods diagram – clear and accessible, ensuring the privacy of non-participant families, least intrusive angles and positions for filming.
Test filming	Peer reference group	Least intrusive camera angles / those most likely to focus on shared interaction, light and sound levels, film quality, development of a filming checklist.
Approaching the fieldwork	Peer reference group Supervision team	Try to 'remain present' (challenges around operating technical equipment / researcher nerves). Be particularly aware of (and note down) anything that is surprising in the fieldwork. Make detailed notes as soon as possible after each field visit.
Questions – individual interviews and focus groups	PhD colleague Supervision team	Training context of an infant massage-trained practitioner, linking questions to main research questions. Reduce number of questions and broaden scope, consider technical nature of some questions.
Research project – emerging concepts, methodology, methods	Presentations – BECERA 2015, EECERA 2015 and 2016, Annual Progress Reviews (2015, 2016, 2017) , Learning Circle group (Centre for Research in Early Childhood colleagues)	'Is it Action Research?' Could a control group be incorporated into the design? 'Why do you need to focus on families facing challenge?' Explain 'pedagogical attachment' / reconsider the research title.
Family description questions and rationale	Peer reference group Supervision team	Employment / housing / engagement with other agencies / pregnancy experiences, restructuring for sense / making less formal. Connect description questions and rationale to research questions.

3.7 Ethical considerations specific to this study

The ethics of this study were particularly complex as the project: 1. Anticipated working with very young infants. 2. Acknowledged that the babies and carers could be considered 'vulnerable' due to the circumstances they faced. 3. Proposed to use the method of video with families as they participated in infant massage sessions. A critical element of this study, and, indeed in my view, of all ethical research, was a thorough consideration of what counted as *informed consent*. The assent and consent of participating babies and carers was particularly relevant to this research project as the young infants would be expected to convey assent and dissent through a range of 'channels', including physical (facial, postural, gestural) and verbal (vocalisation) cues (Argyle, 1996; Doherty-Sneddon, 2003). Furthermore, the study proposed to work with families at a time when they were facing potentially stressful life challenges. A thorough and sensitive approach to consent was therefore critical, including offering a clear explanation of the aims and proposed methods of the study, and allowing families time to carefully consider their participation (see Section 3.7.2).

3.7.1 The ethical approval process

Given the central ethical considerations identified above, the application for ethical approval through the University of Wolverhampton necessitated the careful examination and resolution of a number of key challenges. These included the secure storage of video and other forms of data generated through the fieldwork, informing participants of the possible 'risks and benefits' and withdrawal rights in respect of the study, and a consideration of the approaches to anonymity. These

issues were addressed through a secure data storage protocol which specified the storage of video footage on password-protected external hard drives (Appendix 8, pp.16-22), the 'consent package' described below, and through an individualised anonymisation plan completed with each participating family (Appendix 9).

The EECERA Ethical Code for Early Childhood Researchers

The ethical approval process was viewed as an opportunity to strengthen the ethical principles and processes which were central to this project. Alongside the university's ethical guidance pages, the study adhered firmly to the EECERA (European Early Childhood Research Association) 'Ethical Code for Early Childhood Researchers' (2014), which stipulates the importance of the researcher's 'ethic of respect' in relation to eight key strands:

1. the child, family, community and society;
2. democratic values;
3. justice and equity;
4. knowing from multiple perspectives;
5. integrity, transparency and respectful interactions;
6. quality and rigour;
7. academic scholarship;
8. social contribution

(EECERA, 2014, p.2)

I believe that these considerations are critical to attaining the highest standards of research practice, and therefore aimed to embed them in this project. The study

intended to work with and for the benefit of its participants; young babies, parents and carers, practitioners and early years services. Furthermore, this study aimed to work with a deep respect for all, avoiding judgement or assumption. It also sought to establish a more equitable approach to the research process, where participants were viewed as co-inquirers as opposed to 'research subjects'. Critically, it aimed to work with particular sensitivity to the rights of families facing challenge, and within this, and in relation to infant participants, with careful attention to the 'United Nations Convention on the Rights of the Child' (1989). The study was also structured to interact with and value the worldviews of a range of families and early years practitioners, using affirmative methods to support collaborative learning, and to support practice enhancement. Lastly, the study set out to demonstrate respect for the diversity of research paradigms, methodologies and methods, contributing new understanding whilst adhering to the highest standards of academic integrity.

Ethical approval – partner agencies

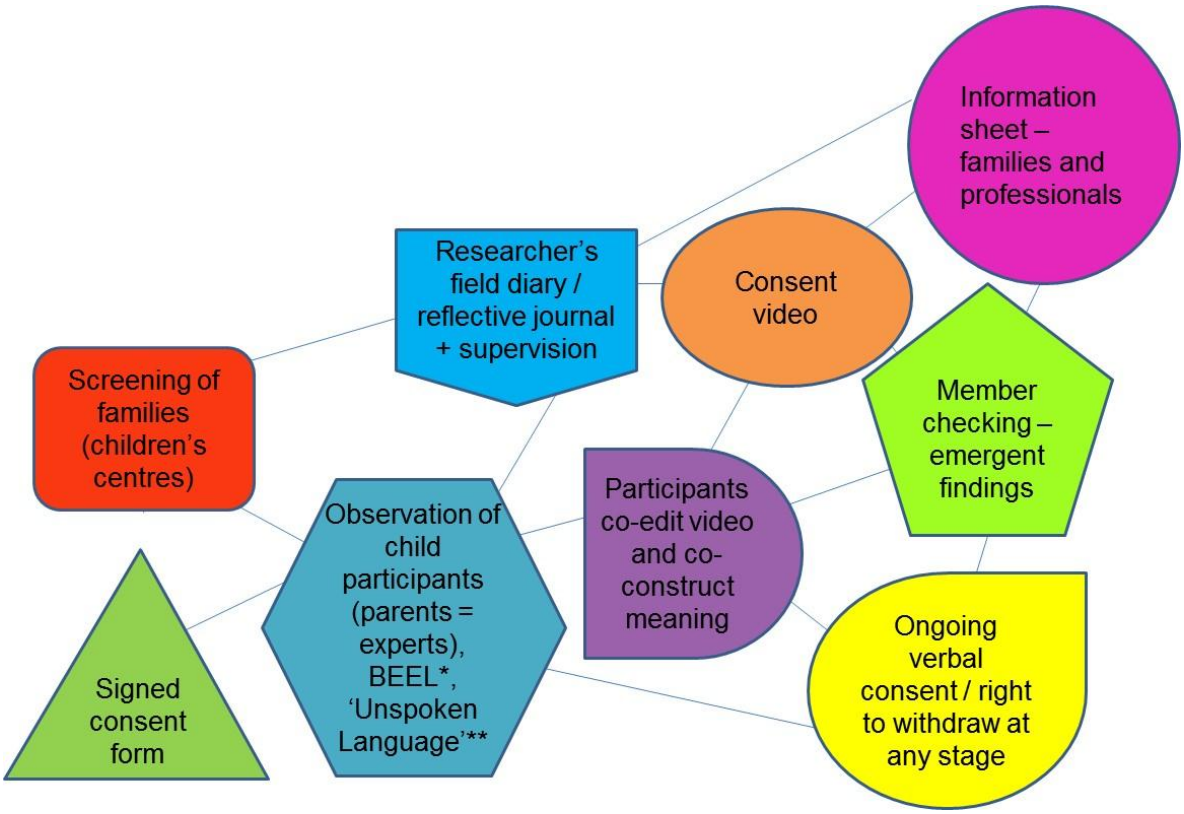
Alongside the University of Wolverhampton's ethical approval process, I was also required to make ethical applications in accordance with two partner agencies' approval processes. The first organisation (a national children's charity) required me to complete a detailed application for ethical clearance to their ethics committee, with supporting documentation including the research proposal, consent paperwork, ethical approval evidence, contracts or terms of reference, and my CV. Unfortunately, due to a lack of potential research sites and to differences in relation to the proposed sample size, research methods and subjectivity of the researcher, we were unable to progress further with this partnership.

The second partner agency was the employing organisation for the health visiting colleagues who had been invited to participate in a focus group at Site 1. This agency required the supporting documentation listed above, as well as the focus group questions before issuing a permission letter for staff to participate. In my view, the scrutiny of other organisations, although time-consuming, strengthens our research work. For example, the feedback from the children's charity around lack of objectivity may have suggested that I had not made my subjective research position clear from the outset.

3.7.2 The informed consent process – a matrix of approaches

The approach to consent was inextricably linked with the ethical considerations of the study; the project aimed to use video with young infants and carers who were facing life challenges, and as they engaged in the intimate experience of infant massage. The consent process needed, therefore, to be comprehensive and rigorous, ensuring potential participants were fully aware of what the research would entail, as well as their rights and agency. Informed consent, I surmised, could not be achieved through a single approach; it is the product of a series of approaches, which allows time for reflection, and is consent *to the best of our knowledge.* Furthermore, it is not a one-off event, but an ongoing negotiation with participants, one that carefully mitigates against the potential for power imbalances. The 'matrix' of nine interconnected key elements (the 'consent package') is illustrated in Diagram 2 and defined in the text that follows:

Diagram 2 – A matrix of approaches to informed consent



The nine key elements

1. The careful identification of potential families by participating children's centre sites.
2. The provision of detailed and accessible information sheets to participating families and professionals.
3. A short 'consent video' explaining the aims and objectives of the proposed research to families considering participating in the study.
4. Participants' rights to withdraw consent at any stage of the study, and the ongoing negotiation of verbal consent throughout.
5. An accessible set of consent forms for participants to sign.
6. Careful observation of participant babies and carers using the Baby Effective Early Learning (BEEL) framework (Bertram and Pascal, 2006) and the 'Unspoken Language' guidance (Doherty-Sneddon, 2003).
7. Participant families invited to co-edit and co-interpret the video with the researcher.
8. 'Member checking' of interpretation of findings with participant families and professionals.
9. Monitoring of the research process through the researcher's reflective journals, field diaries and supervision meetings.

Producing a 'consent video'

With regard to Element 3 (above), I recorded a brief consent video, inspired by the independent researcher Helen Kara, who had spoken at a Learning Circle event (2015b) about the use of animated videos when asking young children to make informed consent decisions. Animations, she stated, could be used to provide children with information about the proposed research, and also replayed, offering

child participants opportunities to come to a considered decision. The use of audio and video information files in research has also been examined by Hammond and Cooper (2011) and Haigh and Jones (2007) and is viewed as an inclusive approach to sharing information. I anticipated that the consent video could sit alongside the information paperwork and early meetings with families, and should any of the potential participants have difficulties with literacy, it would offer another information format. Furthermore, families would be able to replay and revisit the information, and share the video with family and friends before making a decision about participation.

I believe that this approach to gaining informed consent is somewhat innovative, and is a way of working that I intend to develop in future research projects. For example, consent videos could be used as introductory materials for potential participants prior to meeting with the researcher. This could allay participants' possible fears about who they would be meeting with, and provide the researcher with an opportunity to present themselves as just another human being with a desire to learn from others' experience.

Babies' assent and dissent

A key element of the ethics in relation to this project was around obtaining the permissions of participant babies. Whilst the infants' parents and carers would make decisions around the family's participation in this study, it did not, in my view, 'count' as infants' permissions being sought. Indeed, consent and assent in early

childhood is an area explored by researchers such as Mayne, Howitt and Rennie (2015) who assert that young children *can* give informed consent, and that it must be 'meaningful' to them. I agree with this stance, and the infant participants in this study were viewed as unique and capable human beings, who provided clear cues around assent and dissent. I therefore resolved to use Doherty-Sneddon's (2003) guidance around 'non-verbal' infant cues, as well as Bertram and Pascal's (2006) BEEL framework to support observations of infant cues informing filming procedures.

Clear protocols around starting and stopping filming were discussed with families, before the project began, and at each filming session. It was agreed that any cues suggesting infant or carer distress or discomfort before or during filming would mean that it would not begin, or would cease immediately. Furthermore, as I began early site meetings with practitioners, it emerged that the 'Manual for Infant Massage Instructors' (McClure and the IAIM Circle of Trainers, 2005) contained strong guidance on infant cues expressing assent and dissent around massage; this was also incorporated into the filming protocols. An illustration of the sensitive approach to filming with infants and families is provided in Chapter 5, Section 5.3.3.3.

3.8 Summary and critical reflections

This chapter has documented the important, connected and often difficult decisions made in developing this study. It has charted the identification of the paradigmatic, ontological and epistemological stances influencing the study, as well as the careful

consideration of a range of methodological guides. The methodological framework was then identified as a praxeological case study. Linking forward from this, and aiming to get close to the anticipated data, a range of methods were identified and their strengths and limitations explored. Latterly, the concepts of trustworthiness and reflexivity were examined, and the means by which they were addressed in this study explicated. Finally, the ethical considerations specific to this study were identified, the ethical approval processes discussed, and a matrix approach to informed consent outlined. In writing this chapter, I believe that I have clearly articulated my position and beliefs as a researcher, and how these have influenced decisions relating to the frameworks and methods used in the study. I describe this as ‘transparent subjectivity’, a stance which I aimed to maintain throughout the project. The following fieldwork chapters (Chapters 4 and 5) will explore and reflect critically on the successes and challenges around enacting these methodological choices.

Chapter 4 – The pre-fieldwork phase

4.1 Introduction

Chapter 3 provided an explication of the paradigmatic and epistemological stances underpinning this study, and the considerations and decisions around the methodology and methods used. Chapter 4 picks up the narrative from the point where ethical clearance was given, addressing the identification and development of the main activities of the pre-fieldwork plan. It then moves on to discuss the critical early meetings with interested children's centre settings and families, exploring notions of power, the development of equitable and respectful working relationships, and how we work through difficulties around practice.

4.2 Pre-fieldwork phase

Having obtained ethical clearance to proceed with the research, it was important that I developed a clear pathway to entering the field and developing attached research relationships (Formosinho and Formosinho, 2012) with setting practitioners, and subsequently with participant families. A pre-fieldwork plan was therefore developed, identifying the main activities (Appendix 10).

4.2.1 Developing a pre-fieldwork plan – the central tasks

The pre-fieldwork plan provided a structured and step-by-step breakdown of the activities that needed to be completed over a 3 to 4 month period; prior to and in the very early stages of the fieldwork. This included: 1. Completion of required university processes. 2. The identification of potential participant settings. 3.

Selection of video and audio recording equipment. 4. Development of information and consent paperwork for participating settings and families. 5. Information meetings with settings and families.

The pre-fieldwork plan allowed time for research around video camera options, including consultation with a professional film contact to ensure that the equipment selected was likely to support the aims of the study. The filming aimed to get close to the child-carer experience of infant massage, and my contact advised that features such as number of frames per second, video and audio quality, and performance in low light conditions were all important considerations. The final selection was a GoPro Hero 4 Silver Edition video camera, and having made this choice, I built in time to familiarise myself with it and to test out the critical features. I therefore allocated time to experimenting with the camera in my own home, to filming and editing a consent video (Chapter 3, Section 3.7.2), and to test filming with volunteers from my peer reference group and in the empty infant massage rooms at the participating sites (Chapter 5, Sections 5.3.1 and 5.3.2).

The late stages of the pre-fieldwork plan included early meetings with potential participant families; sharing the consent video with them, and providing opportunities to see, interact with, and ask questions about the video and audio equipment. I also allowed time to complete risk assessments and to request information in relation to relevant children's centre policies and procedures. Lastly, I designed an information sheet for participants (Appendix 11) and a set of three consent forms: 1. Consent to participate – families. 2. Video consent form. 3.

Individual anonymisation plan (Appendices 12, 13 and 9). Participation forms were also designed for practitioners and children's centre sites engaging in the project (Appendices 14 and 15).

4.2.2 Approaching potential settings (and self-identification as study sites)

Potential participant children's centres were identified via three main routes:

1. Children's centre practitioners who had participated in an early stages scoping activity via the Centre for Research in Early Childhood (CREC) and had also stated an interest in participating in the fieldwork stage of the study.
2. Self-identification; a colleague put forward her children's centre group as a potential site after hearing about the study at a Learning Circle meeting at CREC.
3. Contact with a colleague at a national children's charity (my former employing organisation). This colleague then connected me with the Regional Children's Centre Leader who expressed an interest in participating in the study.

4.2.3 Building relationships with the sites

Three children's centre sites had expressed an interest in participating in the project, so initial visits to discuss the research were arranged with leadership and infant massage colleagues at each setting. The sites will henceforth be referred to as Site 1, Site 2, and Site 3:

Site 1 – Semi-rural children's centre group (identified through Route 1)

Site 2 – City centre-based children's centre group (identified through Route 2)

Site 3 – Market town children's centre locality group (identified through Route 3)

Initial briefing meetings – Sites 1, 2 and 3

Providing key documentation

Prior to and at the initial briefing sessions, I shared key documentation associated with the project which included the following:

1. Research proposal (Appendix 1)
2. Ethical request form (Appendix 8)
3. A matrix approach to informed consent (Diagram 2)
4. The anticipated research methods (Diagram 1)
5. Pre-fieldwork plan (Appendix 10)
6. EECERA 'Ethical Code for Early Childhood Researchers' (2014).

I was highly aware of the pivotal nature of these early meetings; to me it was fundamental to the development of early working relationships with settings that I demonstrated that the research project had been carefully designed, was ethically sound, and, critically, was *needed.* Practitioners needed to be convinced that their involvement in, and contribution to the study would have utility. The initial meeting and supporting paperwork needed to build trust in the project and researcher so that practitioners would be willing to approach local families with a view to their participation.

Key questions

Alongside outlining the aims, objectives and anticipated methods of the study, the early briefing sessions provided opportunities for potential sites to describe their

communities, to ask for clarification, give feedback, and challenge aspects of the study. Practitioners asked important questions about data storage protocols, raised concerns about protecting the rights and privacy of non-participant families, and asked questions about appearing in the videos themselves. Data storage and archiving protocols had been addressed in the ethical approval paperwork, and this was discussed and relevant sections shared with the leadership team for further consideration.

It was also agreed that test filming sessions at the sites would include an exploration of the most suitable camera angles to avoid inadvertent filming of non-participant families. At Site 1, we decided that I would join the group for the introductory week to begin to build relationships, introduce the project, and assure the group that filming would be with participant families only. The infant massage practitioner at Site 2 also expressed some initial concerns about featuring in the video footage herself. I assured her that the primary focus would be on the participant families, and it was agreed that the films could be reviewed together and any footage that she was not comfortable with deleted. These questions raised some important issues around the privacy of individuals in the wider environment when we consider filming with participants.

Identifying potential participant families

At each of the site meetings, we spent some time discussing how services might identify potential families who may be interested in participating in the study. We agreed that great care needed to be taken around this and that participation should

be an affirmative experience, not an additional source of pressure. It was decided that practitioners would work with line managers and colleagues to identify families who, in their professional judgement, faced a level of challenge but were not thought to be at a critical level due to very complex challenges. To support participating centres' identification processes, I shared a list of possible challenges from an early draft of the participant information sheet (Appendix 16). We also discussed the importance of allowing families time to make a considered decision, supported by the information materials and consent video (link below).

https://youtu.be/PySXIFJHtpE

Anonymisation of settings

Alongside protocols to protect families, the subject of protecting the identities of participating practitioners and settings was discussed. I informed practitioners that usual research practice would be to anonymise both setting and practitioners in the project write up unless they specified otherwise.

Feedback

Practitioners at Site 2 stated that they had found the anticipated methods diagram useful to their understanding of how the project might unfold. This was a helpful piece of feedback; the diagram was then used to illustrate the project at initial meetings with potential participant families.

Outcomes of the initial meetings

At the end of the initial sessions, each site expressed an interest in participating in the study. It was critical to the project that settings, as well as individual participants, gave informed and considered consent. I suggested that the practitioners discussed the project with their teams, and contacted me with any further questions before reaching a decision. After time for reflection, Practitioners at Sites 1 and 2 decided that they wanted to participate in the study. Site 3, although keen to join the study, was unable to progress due to shortages of sufficiently trained infant massage staff.

4.2.4 The participating study sites – contexts

Sites 1 and 2 were set in contrasting contexts; Site 1 was a semi-rural model, and Site 2 located near a city centre. The following contextual information draws on the information shared at early visits with practitioners and my own initial observations.

Site 1

Site 1 was located in a small semi-rural town in South West England and was one of three children's centre hubs led by the local authority, with a fourth commissioned to a local charitable organisation. At the point the fieldwork began (November 2015), Site 1 had just emerged from a period of restructuring, and the children's centre service offer had transitioned to targeted services, usually by referral or invitation, and universal services, which families could pay to access. Infant massage could therefore be accessed via referral or through the universal service. (Rouse, 16/11/15, Field Diary).

At our early site meetings, practitioners reported that issues specific to Site 1 included isolation and poor transport links, domestic abuse, and school attainment. They also highlighted that the children's centre service had a clear focus on attachment, and as such they offered services including infant massage and Theraplay (an attachment-based approach to play). Touch was, in the words of the children's centre teacher *"…pivotal to the service…"* and fundamental to becoming a *"…successful lifelong learner…"* (Rouse, 16/11/15, Field Diary).

Site 2

Site 2 was a children's centre located just outside a large city in England. As the research project began, the children's centre was one of three hubs in the locality, and the staff team were anticipating a period of change due to local authority recommissioning processes. The agency employing the children's centre staff team and offering services to the community was a local charitable trust. The children's centre was located near a high street area where there were local shops, businesses and restaurants. Around the centre was a mix of housing, local schools, and light industrial building units (Rouse, 17/8/15, Field Diary). Practitioners described the local community as culturally diverse, with families speaking a range of languages, and originating from many parts of the world. The centre aimed to recruit staff with fluency in the languages spoken in the community. High housing density was foregrounded as an issue in the locality, with many families living in busy multi-generational households. Some families in the area faced barriers due to having English as an additional language, and for newly-arrived families this could lead to difficulties around accessing maternity services. Other challenges

highlighted included parental mental health issues, levels of adult education, and domestic abuse.

4.2.5 Information visits – Families A, B and C

In accordance with the University of Wolverhampton's *'Human Participants'* (2015b) guidance, it was agreed that the infant massage practitioners at Sites 1 and 2 would make initial contact with potential participant families, explaining the aims and objectives of the study, and asking families to consider a joint information visit. In the late Autumn of 2015, Sites 1 and 2 began to consider which families they would approach to participate in the study. Site 1 was due to begin an infant massage group beginning in February 2016, and Site 2 planned to facilitate a group later in the Spring term. We anticipated that the fieldwork would be naturally staggered across the two settings.

Site 1 - Initial information visits

Site 1 identified and approached three families who were due to join their February group, and they all agreed to an initial joint home visit to discuss the project. From the outset, I had stated that I would fit visits around families' routines and practitioner commitments, so the lead practitioner at Site 1 (Practitioner 1) agreed dates and times of home visits with each of the three families. I believe that these early messages, communicating researcher flexibility and responsiveness are very important ones; we begin to express a deep respect for the lives of the families and practitioners we hope to work with.

In early February 2016, Practitioner 1 and I went out to meet the three families at their homes. Prior to the visits, we agreed that the children's centre *would not* share the individual circumstances of the families with me; they did not have permission, and the level of self-disclosure was a decision for each family to make. We decided that Practitioner 1 would share a brief overview of the infant massage group, talking about the structure of the sessions and sharing photos of how the group may be facilitated. I would then introduce the research project, talking through the 'Information for Families' sheets (Appendix 11), and visual representation of the proposed research methods (Diagram 1). We also agreed that the main focus would be to encourage the families to join the infant massage sessions regardless of whether or not they decided to participate in the study.

Family A

The first joint visit was to Family A. We discussed the visual representation of the proposed research methods and worked through some of the participant information sheets, covering the purpose of the project, the anticipated use of the learning from the study, participation and withdrawal rights. We also part covered ethics, the use of data and its secure storage, and confidentiality. Baby A was awake and alert throughout the visit, and was cradled in his mother's arms. It was important to build in pauses for Mother A to meet Baby A's needs, such as feeding and interaction. Part way through discussing the information sheets, I sensed that Mother A and Baby A seemed a little restless. I therefore suggested that we finished our visit at this point. Mother A said she was happy to read through the remaining information, and we encouraged her to give feedback in relation to the

methods and approach of the study. Lastly, we suggested that Practitioner 1 would contact her in just over a week to see if she had any questions, to establish whether or not she was interested in participating in the project, and to send her the consent video. Mother A said that at this stage she was happy to be contacted via a follow up call.

My field notes documenting this first home visit highlight that I felt I had gone into too much detail in explaining some aspects of the study (Rouse,10/02/16, Field Diary), and was therefore unable to discuss other elements of the project with the parent in the time available. I decided to develop an overview prompt sheet (Appendix 17) addressing the key elements of the study within a naturalistic and flexible structure. Practitioner 1 and I also reflected on the session together, agreeing that the visit had seemed positive overall, and that Mother A had shown an interest in the study and methods. However, we both detected some hesitancy, and were unsure whether or not she would decide to progress further. The second and third home visits were made later the same week, and both, I reflected, flowed better through the use of the prompt sheet (Rouse, 12/02/16, Field Diary).

Family B

The second visit seemed particularly positive; Mother B appeared to have a clear understanding and interest in the project and its aims. Additionally, I noted, the lead practitioner and I were beginning to anticipate each other, to collaborate in communicating the key messages (Rouse, 12/02/16, Field Diary). This was perhaps an early indicator of a developing attached research relationship between the

practitioner and me (Formosinho and Formosinho, 2012). Baby B was asleep in his crib throughout the visit, and Mother B was therefore able to focus solely on the discussion and information materials. Using the prompt sheet as a checklist I was able to cover each of the main elements, as well as attending to the data storage and withdrawal rights sections in more detail. I also highlighted a commitment to ensuring that decision to withdraw would *not* affect the family's rights to access other children's centre services. Mother B said that she had no further questions at this point, and was happy to be contacted the following week by the lead practitioner.

Visit 3

The third and final home visit was with a family that initially agreed to participate in the study, but was unable to continue with the infant massage programme due to health reasons. As the centre was unable to reconnect with the family after this point, I interpreted this as a withdrawal of consent. To protect the family's privacy I have not included an account of this home visit. However, I believe that the parent's question around data security is an important one to highlight. Whilst working through the data storage and confidentiality section of the information paperwork, the parent asked who would see their footage, and expressed concerns that it would be posted to YouTube (Rouse, 12/02/16, Field Diary). I gave a full explanation of the anticipated and boundaried use of the video data, as well as protocols around secure storage and archiving. Critically, I assured the parent that any video data generated would belong to the family, and that *they* would decide how it could be used and with whom it could be shared.

Sharing the ‘consent video’ with settings and families

Having completed the three initial information visits linked to Site 1, my next task was to film and edit the consent video for families. I had anticipated that it would be shared with potential participant families *ahead* of the early information visits (Section 4.2.5.1), with the aim of allaying possible anxieties about meeting with a researcher and participating in research. However, due to delays with the delivery of the video recording equipment, and Site 1’s prompt arrangement of the early information visits, this was not possible. Due to the size of the video file, it could not be sent as an email attachment, and was uploaded to YouTube and a link sent out to the participating sites. Unfortunately, access to YouTube was prohibited at Site 1 so the team were unable to review the film. During a subsequent visit to complete participant setting paperwork, I showed the video to the children’s centre co-ordinator on a mobile device and was given permission to share this with families during the follow-up home visits (Chapter 5, Section 5.3.3).

Site 2 – Initial information visits

Joining the baby group – early meetings with the children’s centre families

The staff team at Site 2 told me that families referred for infant massage were predominantly identified by the family support team, and as the centre had a weekly term time group for babies and cares facilitated by Practitioner 2, we agreed that I would begin to visit the group from January 2016 onwards. The aim was to be introduced as a researcher working on an infant massage project with the centre, to become known to the families, and to hear views around the effects of the practice and thoughts on the use of video in research.

One parent talked about the positive effects of massage on adults through her role as a beautician, and another of her child's enjoyment of the back massage strokes during an earlier infant massage course (Rouse, 29/01/16, Field Diary). Another parent, who was also a market researcher, asked me whether there were plans to work with comparison families not participating in the programme. I explained my belief that it would be unethical to exempt families from massage in this study. However, future research might work with families who had decided not to participate in infant massage programmes (Rouse, 11/03/16, Field Diary). Indeed, this area of research is amongst the recommendations of this study (Chapter 8, Section 8.3). Practitioner 2 later informed me that she had spoken with several families who were interested in participating in the project, and we agreed that she would meet with her line manager and centre leader to make decisions around families who met the criteria of 'facing challenge'. Once this was done, the joint information visits would be arranged (Rouse, 06/04/16, Field Diary).

Home visits

In this section, I will describe the home visit with the family who participated in the project. A second family also agreed to participate, but was unable to begin work on the project due to wider family issues. In Section 4.2.5.1 which follows, I will discuss the practice issues observed during a home visit with Practitioner 2, and how they were resolved.

Family C

I had been introduced to Family C (Mother C and Baby C) through visits to Site 2's baby group, and the children's centre leader had also highlighted them as a potential participant family. The visit seemed positive; Mother C appeared a little tired but appeared interested in the project. We discussed her changing shift patterns and Practitioner 2 suggested that the centre could offer her a mix of individual and group sessions to work around her needs. Mother C asked if her husband could take part in the individual sessions and Practitioner 2 said it would be positive for dad to participate too. The visit ended as Mother C said that she didn't have any particular questions, and didn't anticipate that she would. Practitioner 2 said that they could talk further about the project at the baby group later that week if she wished.

4.2.5.1 Working through practice issues with participating sites

Identifying practice issues

Practitioner 2 had arranged four home visits across three days, working around prospective families' routines. Whilst the first two visits seemed positive, during the third visit I began to have concerns in relation to the appropriateness of the processes used to identify families, Practitioner 2's grasp of families' individual circumstances, and her understanding of the project's focus on families facing challenge. Arriving at the third visit we were greeted by the identified parent who said she was on a tight timescale and would appreciate it if the visit was fairly brief. I began with the central aim of the project; to develop an understanding of the difference that infant massage makes to families at times when they are also facing

challenges. The parent stopped me, saying that she did not feel that she met the selection criteria, aside from being a new parent. It was agreed that we would bring the session to a close, and we thanked her and left (Rouse, 04/05/16, Field Diary).

Having left the family home, I asked Practitioner 2 if our third visit had been to a referred family. She said that the family had been referred to infant massage some time ago by a colleague who was no longer working at Site 2. However, Practitioner 2 did not appear to have an understanding of the family's circumstances. I suggested that it was possible that the family had experienced a difficult situation which had now passed, and therefore did not feel that they met the criteria (Rouse, 04/05/16, Field Diary). Later the same day, I met with the centre leader to update her on the progress of the project and at the same time shared my developing concerns.

Meeting with the centre leader

The session with the centre leader was an opportunity to talk through my concerns with the aim of resolving them in a manner that supported Practitioner 2, and that maintained the professional standards of the project and its work with families. I talked through the three home visits carried out so far, the responses of the parent at the third visit, and my concerns around Practitioner 2's selection processes. I also highlighted another issue; if we had made visits to families who did not meet the criteria and who subsequently joined the infant massage group alongside other families who did, this could cause a privacy issue. The centre leader said that she would carefully explore the identification processes used, and we agreed that we

would speak again the following day to consider our next steps (Rouse, 04/05/16, Field Diary).

Finding solutions and moving forward

The next day, I spoke with the centre leader who confirmed that two of the four identified families did not, in her view, meet the criteria of 'facing challenge'. She stated the centre's continued interest in and commitment to the project, and we agreed that it would not be appropriate to go ahead with filming in the infant massage group. We decided that a possible solution would be to film with families during individual massage sessions, and this may also be more supportive for Practitioner 2. The centre leader assured me that she would discuss the potential privacy issues with Practitioner 2, and propose the alternative filming strategy. She also stated that the centre would contact the two families who did not meet the research criteria to explain the reasons for not going ahead at this time (Rouse, Field Diary, 05/05/16).

Collaborative research: What do we do when things go wrong?

I also discussed the practice issues with my Director of Studies and we agreed that I would reflect further on this, consider additional preventative strategies, and read a chapter entitled 'Seduction and Betrayal in Qualitative Research' (Newkirk, 1996). Using my field diary, I built a visual representation of the significant interactions with the practitioner and team, as well as any factors which may have contributed to the errors in identification of participant families (Rouse, 10/07/16, Field Diary). I felt that I had been very clear in initial briefing meetings with Practitioner 2, her line

manager and the centre leader that the project would focus on the experiences of infant massage of families who could be described as ‘facing challenge’. I had also provided clear examples of life events and pressures that could lead to difficulties for families, and we had agreed that the centre team would need to work together to carefully identify families. Additionally, I had spoken with the centre leader during the early stages of the fieldwork, and had suggested that Practitioner 2 may need further focused support around the identification of families. It was also important to recognise that Practitioner 2 had a number of competing responsibilities to balance, and may have faced workload issues. Alongside this, there had been changes in line management around the time that the fieldwork began, which may have contributed to the communication issues.

In my view, it is critical that we learn from the difficult experiences in the research process, acknowledging difficulties with honesty, and thinking flexibly about solutions to resolve them where possible. To further safeguard against identification issues in the later stages of the project, I developed a more detailed set of criteria (Appendix 18) with an expanded range of examples of ‘challenging circumstances’, and including an excerpt from Ofsted children’s centre guidance describing ‘target families’ (Ofsted, 2014). The criteria document was shared with centres that participated in the later questionnaire phase (Chapter 5, Section 5.8). Lastly, I resolved that future work where participant families were identified in this way would also require clear evidence of a shared decision made by participating practitioners and line managers (Rouse,10/07/16, Field Diary).

Newkirk's chapter (1996) suggests that in a research environment, an implicit contract is established between researcher and participants whereby it is understood that we will not write or share information that could be construed as overtly critical of participants. Newkirk also posits the view that standard approaches to research with participants (the 'seduction'); informed consent, non-participation, anonymisation, and withdrawal at any stage, serve only to fuel the belief in the researcher's positive intentions. Consequently, our self-positioning can lead to moral challenges if we subsequently need to share difficult findings.

He suggests three central strategies to guard against the uncomfortable realities of sharing challenging news: 1. That the consent agreement makes explicit the researcher and participants' willingness to raise issues that occur, and any reticence expressed by participants is used to facilitate a dialogue encouraging them not to take part. 2. Participants should be encouraged to co-interpret the data generated. 3. The researcher has an ethical responsibility to intervene where there are concerns and support participants to address them. I am confident that the design of the study was such that all participants were routinely asked, but not expected, to co-interpret the data, and that I sensitively worked with Site 2 to address practice issues. However, in future work with settings I will ensure that we agree from the outset how practice concerns will be supportively challenged.

4.2.5.2 Working collaboratively with participants

The following section explores some of the significant aspects which were, in my view, critical to working *with* research participants. Whilst Newkirk (1996) discusses

the ‘seductive’ risks in research with others and how they may be offset, it is also important to examine the ways in which this project, with its praxeological case study methodology (Chapter 3, Section 3.3.5) aimed for strong partnerships which could endure the pressures of sharing difficult news. I believe that to work *with* participants we need to establish balanced working relationships, think carefully about self-presentation and power, invite feedback, and communicate safely.

The significance of early infant-carer relationships is widely recognised (Chapter 2), and the beginning interactions with families and practitioners also lay critical foundations which influence the development of equitable working relationships. Indeed, the position of respect for participants is one that we need to reinforce repeatedly. We also need to consider how we transmit messages about power; Bryman’s (2012) guidance around facilitating groups includes the suggestion that the researcher carefully considers their self-presentation and clothing. This influenced my early meetings with families; I was careful to describe my professional heritage in a non-hierarchical manner, and I ensured that clothing choices were tidy yet unobtrusive. In my view, it is also vital that we invite feedback from families and practitioners in relation to any aspect of the project. I believe that constructive feedback from potential participants enhances the study, encourages collaboration, and supports us to get closer to the data we seek.

Finally, participants need to feel safe to join with and stay in the study; they need to feel ‘contained’ (Bion, 1962). This stance connects strongly with my conceptualisation of infant massage presented in Chapter 7 (Section 7.3.1). Early

communication with families was carefully managed, with infant massage facilitators as gatekeepers, arranging initial discussion visits, and liaising between potential families and me. Indeed, it was not until after families had made their decisions around participation, *and* had given clear verbal consent for their contact details to be shared, that I made direct contact with them using the mode of their choosing. In my view, it is critical that we attend to the details of how we communicate our intentions to others; as researchers we must maintain high levels of self-awareness to do this, and this is pivotal to developing respectful and productive working relationships.

4.3 Summary and critical reflections

This chapter has set out the important early stages of entering the field, and the development of a clear pre-fieldwork plan. A key learning point has been around the critical importance of a *layered* development of trusting and 'attached' working relationships (Formosinho and Formosinho, 2012) with participant settings and subsequently families. Additionally, I have come to understand the need to have early discussions around protocols for safely challenging issues that may arise through research. Moving forward, Chapter 5 will document the unfolding fieldwork stage, describing the methods used to get close to the perspectives of participants. It will also position the fieldwork as demonstrating innovation through the interpretation and use of the selected methods; encouraging families in particular to feel a strong sense of agency in the project, as co-constructors of knowledge with the researcher.

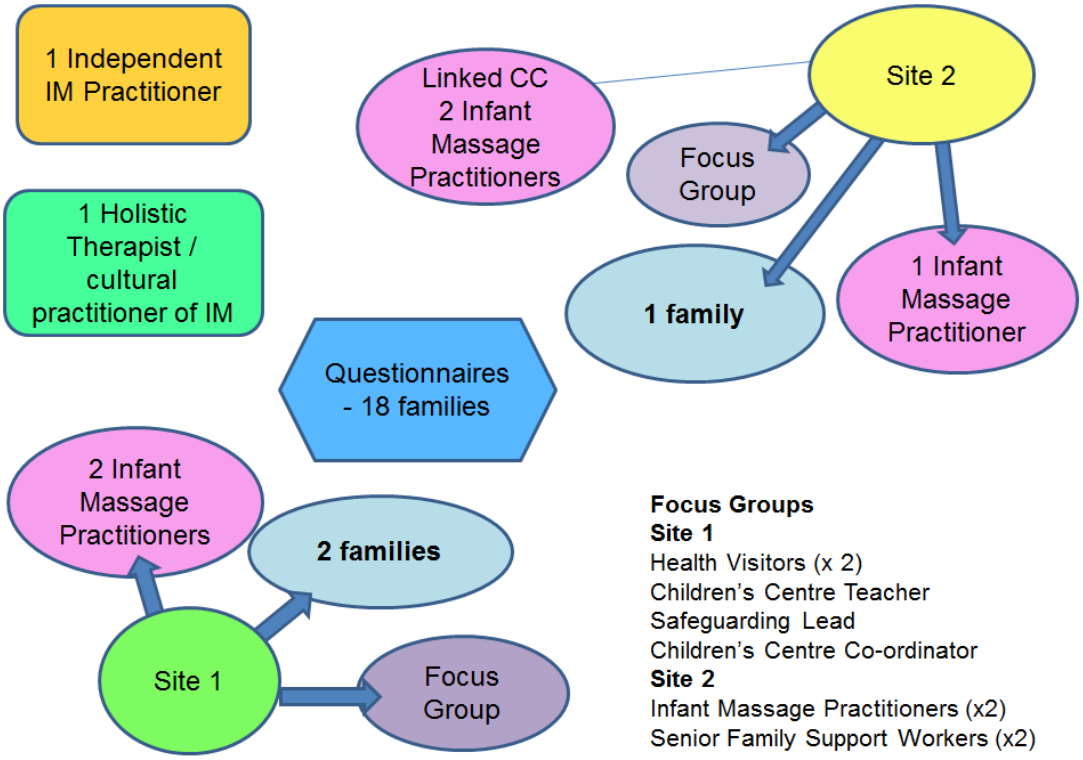
Chapter 5 - The fieldwork phase

5.1 Introduction

Chapter 5 builds on the pre-fieldwork activities explored in Chapter 4, providing a detailed and reflective account of the main fieldwork phase. The five main methods, namely video, individual interviews, focus groups, creative activities, and questionnaires are adapted in response to dialogues with participants and research sites. The importance of defined endings with participant families is also explored. The chapter focuses in to provide more detailed accounts of methods such as video and creative activity, and 'zooms out' for those where a considerable body of literature already exists. Furthermore, 'vignette episodes' are presented; detailed descriptions of short episodes of dyadic activity illustrating key aspects of the experiences of Families A, B and C (who were introduced in Chapter 4, Section 4.2.5) in group and individualised massage settings. Thus, the reader will be offered important insights into how the methods were interpreted to support this research, and an enhanced understanding of the massage contexts and fieldwork from the perspectives of three families.

5.2 A participation map – a diagrammatic representation of the participants and research sites

Diagram 3 – A participation map



5.3 Video

5.3.1 Test filming at participant centre sites and reflections

Identifying an appropriate filming routine

This research project aimed to get closer to the experiences of infant massage of participant families (Johansson, 2003; Pramling Samuelsson and Johansson, 2009). It was anticipated that a naturalistic approach to filming would be used in the context of group infant massage sessions. Two of my supervisors had been members of the international research team of the 'Children Crossing Borders' project (Tobin *et al*., 2010), a study which made extensive use of video to document the daily routines in a range of early years settings. They were therefore well placed to advise on the use of video in this context. We agreed that as infant massage groups were 60 to 90 minutes in duration, the least intrusive way to approach filming would be through a time lapse approach. It was anticipated that this would be through 10 minute segments of filming with each family at key points; the beginning, middle and end of the massage routine, on a weekly basis, and for the duration of the programme.

I was also mindful that video had the potential to be a rich data source; in a Radio Four programme entitled 'Baby Talk' (2014), the researcher Colwyn Trevarthen stated that 27 seconds of film of a young infant talking with her mother had provided all the information needed to develop the theory of communicative musicality (Malloch, 1999; Trevarthen and Malloch, 2002). Using a boundaried approach to data generation would, in my view, keep the quantity of recorded material to

manageable levels. Communicative musicality was explored in the literature review underpinning this thesis (Chapter 2) and is also connected with the conceptualisation of infant massage in Chapter 7 (Section 7.3.1).

Accessing specialist filming advice

During the pre-fieldwork stage I accessed specialist advice from a filmmaker with extensive experience in research in the early years. This colleague provided me with a range of specialist support; guidance around filmmaking techniques, the selection of video and audio equipment (Chapter 4, Section 4.2.1), and in relation to the ethics and permissions around filming with young babies and their families, which informed my detailed ethical request paperwork (Appendix 8).

Test filming

In January 2016, I visited the two participating children's centre sites to carry out some test filming in the empty infant massage rooms. As an inexperienced film-maker, the purpose of this was to consider the necessary logistics, benefits and risks, and to experiment with the video and audio recording equipment alongside the practitioners who had agreed to participate in the filming. Test filming with Practitioners 1 (Site 1) and 2 (Site 2) allowed us to experiment with the camera field of view, location and height to facilitate unobtrusive filming focusing solely on the participant families. We also mocked up the layout of the massage mats for group sessions, which at both sites was usually in a circle. Additionally, we tested out filming in different light conditions as at Site 1 in particular, the room blinds were drawn to give a subdued light during infant massage sessions.

Having tested out a number of locations, it was agreed that the optimal position for the camera was behind the participant carers and to the side. This would ensure that the camera was not in the carer's eyeline, which we anticipated would be least obtrusive. At Site 1, the number of families due to join the programme was unknown; invites were sent to families who had consented to a referral, as well as a blanket invite to families living in identified Super Output Areas. (SOAs are small geographical areas which were created to facilitate enhanced fine-grained statistical reporting [Office for National Statistics, 2018]). We therefore completed test filming activities across two rooms; the larger of the two would be used if the group size required it.

5.3.2 Test filming with volunteer participants and reflections

In addition to the test filming sessions at the participating children's centres, I also completed a short piece of filming with a member of my peer reference group (Chapter 3, Section 3.6). Peer 2 had offered to participate in a test filming session with her daughter, suggesting that this might support the identification of any practical issues linked to the upcoming filming in the baby massage groups. At the time of filming, Peer 2's daughter was just under 12 months old. Before beginning, we showed her an early test video I had made featuring my family cat, which was a favourite animal. My colleague asked her daughter if she was happy to be filmed; she smiled and nodded, which my colleague interpreted as assent.

We made two short films of Peer 2 and her daughter singing songs and reading together, and found that more of the child-carer interaction and activity could be

seen when the tripod was extended and the camera angled down. Additionally, the video quality was good enough to document the more nuanced aspects of the interchanges, such as physical gestures, expressions and most vocalisations. The audio device provided an additional high quality sound recording which could be used to supplement the audio picked up by the camera. Filming stopped when our young participant began to talk about going to the park, and also stated that she wanted to watch 'the cat' again. We understood this as assent to film being withdrawn. Using the small screen on the reverse of the camera, I replayed some of the film footage for them to watch, as well as revisiting the short video of 'the cat'.

Reflecting back on this piece of filming (Rouse, Field Diary, 25/02/16) I noted my nerves whilst setting up the equipment. Peer 2 and I agreed that some sort of protocol might support this, and I developed a prompt list to use at each filming session (Appendix 20). We also discussed camera positions, and Peer 2 suggested that I considered a location that prioritised the experience of the young infants in the filming, given that parents and carers would have their 'say' in the co-analysis of the films.

5.3.3 Site 1: Filming in the infant massage group

<u>Week 1</u>

Infant massage groups at Site 1 were usually 7 weeks in duration. Practitioner 1 explained that the first week was designed to be an introductory session, as the centre team had found that families often felt nervous in the early stages of joining infant massage groups. The icebreaker week was planned to allow families time to

complete children's centre registration forms and initial assessment paperwork, and to begin to get to know others in the group. The children's centre used a detailed self-assessment booklet to gather outcome data. Practitioner 1 described this as a 'work in progress', acknowledging that it was quite complex, and in need of further refinement. We agreed that I would join this session, briefly introduce myself and the project to the group, and spend some time with the participating families ahead of filming the following week.

Prior to the first group session, the families with whom we had made initial information visits (Families A, B and a third family who were unable to continue with the programme) had spoken with Practitioner 1 in a follow up phone call. They had all agreed to the consent video being shared with them, and had confirmed that they were interested in going ahead with the research. Family A had expressed some reservations regarding their suitability as they felt that they had moved beyond the challenges they had faced. Practitioner 1 had suggested that they discuss this with me during Week 1 of the group.

The session was busy, with eleven families joining the group in the children's centre hall. During the activities I was approached by Father A, who expressed concerns that the family may not be able to contribute to the research as their challenges had subsided. However, I suggested that they could offer a valuable perspective as a family that had recently emerged from a difficult time; one that families in the midst of challenges may not have. Moreover, they could withdraw at any point if they felt that their participation was not meaningful. Father A said he shared my perspective,

and we agreed that I would visit the family home the following week with a view to completing the consent paperwork. I also made a note to revisit their concerns (Rouse, 22/02/16, Field Diary).

I also spent some time talking with Mother B; she said she was still happy to participate in the study and we agreed that I would make a home visit the following week to complete the consent paperwork. Baby B appeared quite unsettled and tearful during this first session, and Mother B had opted to sit at the side of the group in the seating area provided. I was unsure how comfortable Mother B was to be around others when her baby was distressed, so alternated between them and the rest of the group with the hope of supporting her to feel included but not crowded (Rouse, 22/02/16, Field Diary). Reflecting on this first group session in my field diary, I commented: *"Another layer of 'getting to know you in place."* (Rouse, 22/02/16, Field Diary) At this early stage, I was aware of the sedimental process of building working relationships with families and practitioners which linked strongly with the concept of attached research (Formosinho and Formosinho, 2012) explored in Chapter 3.

Home visits to complete consent paperwork

Ahead of Week 2 of the infant massage group, I visited the participating families at home to complete their consent paperwork. It was an important opportunity to check that families had been given sufficient information so far, to see if they had any questions, and to highlight the contact details for my supervisors and the Head of Centre should there be any concerns about the study or my practice.

Additionally, I used the session to show families the video and audio recording devices that would be used, to prompt further discussion, and to reassure them they were relatively small in size and likely to be less intrusive. Lastly, I asked the families if they would be happy for a link to the consent video to be forwarded to them. All three families stated that at this point that they would like to participate in the study, and I began to develop an awareness of the personalised way in which I would be working with them. Families made very individualised choices regarding the levels of anonymisation and how widely the data would be shared, which I interpreted as their sense of agency in the project (Rouse, 29/02/16, Field Diary).

Weeks 2 – 7

Course structure

Following on from the introductory session (Week 1), Weeks 2 to 6 were designed to build a full massage routine, with attention to a new body section and corresponding strokes added each week. The intention was that during Week 6, the infant massage facilitator and families would work through a full body massage, and recap elements where requested. Week 7 was allocated to group reflections on the programme overall, end of course self-assessments, and signposting to subsequent groups.

Room layout

Each week, the room was set up with infant massage mats which were laid out in a circle, and a range of heuristic play equipment and infant massage reference books

set out invitingly in the centre. The window blinds were partially drawn, and an oil diffuser and CD player placed on the table at the side of the room. This created an environment with subdued light, the scent of essential oils, and gentle music as families arrived at the session. Participating babies usually lay on towels on the mats provided, their heads pointing towards the centre of the circle. Parents or carers would kneel or sit at the end of the mats, facing their babies. The infant massage practitioner was responsible for facilitating the group; beginning and ending each session with the 'Hello' and 'Goodbye' songs, leading discussions, and modelling the strokes with a demonstration doll. A second facilitator with a massage doll also supported the group.

For ease of filming, and to ensure that other non-participating families were not inadvertently filmed, we asked participant families to sit next to each other, and alongside the infant massage practitioner in the group circle. I sat behind and to the side of the camera tripod and sound recording device, which were positioned behind the participating families and to the side. The room layout is shown in Photograph 2 which follows.

Photograph 2 – The infant massage room

Filming with the participating families (Weeks 2 to 6)

Five sessions (Weeks 2 to 6) were assigned to filming with participating families. Family B had a difficult experience in the group, and this was explored as we co-interpreted their infant massage films (Chapter 5, Section 5.3.6). They were unable to participate in the massage or filming for the majority of the sessions, with Baby B distressed in Weeks 1 and 2, and asleep for much of the remainder of the course. The following vignette episode is built from notes made in my field diary, and offers an important representation of the challenges that some families may face in joining a group:

5.3.3.1 Vignette episode – Family B

Early difficulties adjusting to the group environment

Infant massage group – Week 2 (Filming session 1)

This episode begins as Family B arrived for the first session of guided massage and filming. Their massage mat was situated in the circular layout, (see example in Photograph 2). In readiness for filming, the camera, tripod and sound recorder were set up near to and directed towards it. Once the majority of the group had arrived and were settled on their mats, Practitioner 1 introduced the first series of strokes. As the guided massage began, Baby B was crying and appeared quite distressed. After a few minutes it became apparent that it would not be possible to film with the family at this point. I wanted to ensure that Mother B did not feel under pressure to settle Baby B and to participate in filming, and told her that I would move the equipment to work with other families. After some initial difficulties, Mother B was able to soothe Baby B and he fell asleep. The family remained in the group and

observed the demonstration of the strokes. Towards the end of the session, Baby B woke up, and spent some time lying on his back, smiling and interacting with Mother B. As the family left the group, Baby B appeared happy, continuing to smile and look at Mother B (Rouse, 29/02/16, Field Diary).

In my view, this vignette episode demonstrates that for some families, the group environment may require time to adjust to; the introduction of new places, smells, sounds, people and experiences may initially be overwhelming for the infant and carer. For Family B, who faced difficult personal circumstances (outlined in their family description in Chapter 6, Section 6.4.2) before and during their participation in the massage group and research, the timing of joining a group may have been an additional source of pressure. Furthermore as I reflected back on the session, I recalled Mother B briefly mentioning that Baby B had become 'overheated' during Week 1, and that a pattern of overheating and tearfulness had recurred for a few days afterwards (Rouse, 29/02/16, Field Diary). This pattern could be interpreted as indicating a minor illness or regulation difficulty. Indeed, some weeks later, Mother B stated that Baby B may have been experiencing colic symptoms around the time of the early massage sessions, leading to discomfort and unsettledness. Additionally, she said that she had been feeling anxious about joining the group, and thought that Baby B may have responded to this. Celebi (2013) named this the negative feedback loop (Chapter 2).

As Baby B appeared to find the early weeks distressing, and later weeks coincided with his sleeping routines, I was concerned that Mother B may be feeling frustrated at their limited experience of massage whilst other families appeared to engage

more fully (Rouse, 22/03/16, Field Diary), and that the overall experience could negatively affect her confidence. I was also aware that she may be feeling pressure as there had been only one filming opportunity. It was imperative that I reminded her of the richness of the shortest sections of film data exemplified in the excerpt from the work of Colwyn Trevarthen, (2005), and shared at an early home visit. Family B's experiences of the massage group are explored in more detail in the co-interpretation of their infant massage films later in this chapter (Section 5.3.6).

Family A appeared to adjust more comfortably to the group environment, and were able to participate in the massage and filming each week. It seemed that the sessions, particularly in the earlier weeks, had an important social function for Baby A. The following vignette episode provides a detailed description which, I believe, clearly illustrates this:

5.3.3.2 Vignette episode – Family A

The social function of the group

Infant massage group – Week 3 (Filming Session 2)

Barcode: **FA:IMG:VR:2b/5:S1:LR:070316**

Timespan: 00:00 – 05:04 minutes

This significant episode occurred after Baby A and Mother A had been massaging together for approximately 16 minutes. Throughout the massage, Baby A seemed interested in the other members of the group, looking in the direction of Mother B (sitting on the adjacent mat), me, the camera, Practitioner 1, and other families.

Upon hearing another baby's vocalisations, he appeared to smile, look in their direction, and vocalise in response. Just after the 16 minute point, Baby A began to sound distressed; Mother A stroked his face and lifted him to a sitting position facing her, which settled him briefly. However, as the massage recommenced, Baby A began to cry. Massage and filming stopped immediately. Mother A picked up Baby A and sat him on her lap, giving him view of the group of carers and babies. She then picked him up and walked around the perimeter of the group to calm him further; he settled. I discussed my emerging thinking that the group had a strong social function for Baby A with Mother A. She said she thought this was possible, telling me that a group of friends had visited the previous Friday; Baby A had been trying to hold hands with other babies when they came near. Additionally, Baby A often held hands with her and her husband, Father A

(Rouse, 07/03/16, Field Diary).

In my view, this episode gave the family and researcher an important opportunity to observe and recognise Baby A's capacities as a 'little social being' (Trevarthen and Malloch, 2002). He was an individual with a powerful drive to engage with others through a range of channels of communication. It also highlights the group environment as one offering rich social opportunities; facilitating interactions with multiple other persons and objects. It seemed that the group context offered opportunities to practice triangular (Fivaz-Depeursinge, Lavanchy-Scaiola and Favez, 2010) and group communication (Selby and Bradley, 2003), and to begin to incorporate objects (here, the research camera) into dialogues in preparation for secondary intersubjectivity.

5.3.3.3 'Detours' in the research

Changes in the focus of filming

As Family B had been experiencing some difficulties around settling in the group, it was important to broach with Mother A the emerging reality that filming may well focus largely on her family. However, she confirmed that she was happy for them to be filmed and talked with me each week about Baby A's developmental progress between sessions. Indeed, as we started Week 6 (the final week of filming), Mother A informed me that they would feed at the beginning of the session, allowing us to film the later stages of the massage routine (Rouse, 04/04/16, Field Diary). I interpreted this as Family A's sense of agency and co-construction of the research; Mother A felt that we did not have sufficient footage of the ending sections of the massage routine, and had planned how this could be addressed.

Adapting filming to routines

Due to the routines and realities of the participating families, it was not possible to film at the beginning, middle and end of the infant massage sessions as planned. Filming had to be more opportunistic, i.e. that we filmed when the babies and carers were settled and comfortably participating in the massage. The beginning, middle and end related more to the families' 'episodes of engagement' (Stern, 2002), rather than to points in the routine. This is what Jopling, Whitmarsh and Hadfield (2013) (influenced by Pirrie and Macleod, 2010) might describe as a 'detour' in the research process.

Sensitivity in filming

Whilst filming with Families A, B and C, there were occasions where participating babies showed signs of upset and sensitive decisions needed to be made around not beginning to film or stopping filming if it was already underway. For example, a decision *not* to begin filming was made due to Baby B's clear distress (Section 5.3.3.1 – Vignette episode). Later in the study, and during the second individualised session of infant massage with Family B (Section 5.3.4, which follows), Baby B appeared to oscillate between laughter and beginning to cry. Mother B seemed confident to contain his emotional state, leaning further forward, making her eyes and mouth wide, speaking softly, and then singing 'Tommy Thumb' whilst massaging his arm (FB:IM1-2-1:VR:6/6:S1:LR:260416). He appeared comforted and we continued to film.

Later in the session, he seemed to become more distressed, and we agreed to stop filming and massage to allow Mother B to soothe and feed him. Making these decisions required a sensitive approach to ethical practice; it was critical to this study that families' privacy was respected, and that they did not feel obliged to continue with a recording session which could exacerbate the pressures around times of infant distress. To add a further layer of privacy, at the co-interpretation stage (Section 5.3.6), families were provided with their unedited footage, and asked if they would like any sections of film edited out.

Early reflections around the infant massage group

Part-way through the infant massage group, and particularly in response to Family B's experiences, I began to consider the possibility that the project recommendations may include the suggestion that infant massage should be offered more flexibly to better meet the needs of families at times when they face challenge. Furthermore, whilst groups seemed effective for some families, the timing of the infant massage experience appeared to be critical, *"…like catching a wave to the shore. …"* (Rouse, 22/03/16, Field Diary).

As the programme moved into the final weeks, Practitioner 1 and I discussed the possibility that Family B had found the infant massage group a difficult experience, and that limited opportunities to practice the strokes could negatively affect Mother B's confidence to try them out in the home environment. We agreed that it would be supportive to offer Family B some further one-to-one sessions, and identified several dates and times of day that might better suit their routines as well as a smaller, more intimate room in a children's centre building close to the family home. We anticipated that this would offer an environment that felt safer to Baby B, and would avoid extended travelling. Practitioner 1 contacted Mother B to suggest this, and also to ask whether or not she wanted to participate further in the filming, which, given their experiences, was important to revisit. However, Mother B said she that was happy to participate in all aspects of the 'detour', and we worked together for a further two sessions, discussed in Section 5.3.4.

5.3.4 Site 1: Observations during filming with Family B

Session 1

Practitioner 1 and I met with Family B at their local children's centre for a mid-morning session as it was anticipated that this time of day would fit better with Baby B's sleep routines. By contrast with the large sports hall used for the infant massage group, the room was small, carpeted and warm. Practitioner 1 and Mother B laid their massage mats side by side and I set up the camera and audio recorder in the corner of the room. Before massage began, Practitioner 1 and Mother B talked briefly about Baby B's experience of group situations. Mother B said that he was managing to be in social settings for short periods, but then needed to be back at home. (Rouse, 08/04/16, Field Diary). The practitioner led Mother B and Baby B through the infant massage routine, beginning with the legs and feet. As I revisited the film footage, it was noticeable that Baby B's physical posture appeared more open and relaxed (legs and arms stretched out), and that he played with a string of beads for much of the session. I also observed that Mother B appeared a little 'tentative' during the session, and reflected that the presence of the video and sound recording equipment as well as anxieties when learning and sharing a new skill may be the source of this (Rouse, 08/04/16, Field Diary).

The massage was divided into sections in response to Baby B's cues, with the first period lasting for over 25 minutes. This was Baby B's first extended experience of skin-to-skin infant massage, and it appeared that the more intimate setting and timing of the session were supportive factors in this instance. Baby B's responses to singing were also very noticeable; at one point in the session, he began to make

vocalisations, which indicated to us he was unsettled. The infant massage practitioner began to sing the song ‘Tommy Thumb’, and Mother B began to join in quietly. I sensed that it would support the session if I participated and joined in too. Baby B settled quickly, apparently soothed by the impromptu singing. This emergent theme (musicality and the soothing nature of song) is discussed in Chapters 6 and 7. We agreed to draw the session to a close as Baby B was becoming unsettled; the family had massaged for just over 30 minutes, which was a substantial length of time for a first significant experience.

Following up – Week 7 of the infant massage group

Three days later, I caught up with Family B at the last infant massage group. Mother B said that Baby B had slept for 4 hours without waking after their one-to-one session, which was unusual. Baby B appeared relaxed as he arrived; he was awake and alert, and spent some time exploring the bead strings from the sensory basket, before lying with other babies on the large mat area. Mother B and Baby B both appeared more at ease in the group than during previous weeks, enjoying interaction time together before and during the session. Mother B lifted Baby B, bringing them face-to-face, and they exchanged smiles, dialogue and laughter. (Rouse, 11/04/16, Field Diary).

Session 2

As Family B arrived for their second individual massage session, Baby B was awake and smiling at his mother. As she lifted him out of his buggy, he appeared to smile at me over her shoulder (Rouse, 26/04/16, Field Diary). At the beginning of

the session, Mother B told us that Baby B was now more settled in crèches and groups, and that he had begun to reach for other babies' hands. The second massage session was shorter than the first as Baby B needed to feed and became unsettled during filming. He was active throughout, making vocalisations, holding his feet, and reaching for Mother B's face and his bottle when feeding (Rouse, 26/04/16, Field Diary). Mother B appeared increasingly confident in her interactions and capacity to soothe Baby B, for example saying *"It's not that bad…"* when Baby B cried at the end of the massage session (Rouse, 26/4/16, Field Diary).

5.3.5 Site 2: Observations during filming with Family C

Sessions 1 and 2

Family C participated in two individual sessions which were approximately 4 weeks apart. Sessions were arranged for the afternoon on both occasions, working around Baby C's sleep routines, Mother C's work commitments and Practitioner 2's timetabled activities. The room was laid out with two massage mats; one for Family C, and one for Practitioner 2 to use with the demonstration doll. Mother C was in the late stages of her second pregnancy, so back support was arranged to ensure she was as comfortable as possible whilst massaging. Again, the video and audio equipment was placed in a position that was as unobtrusive as possible, and checking with Mother C that she was comfortable with the placement. Baby C was awake and alert throughout both sessions. He appeared very aware of the other adults and objects in his surroundings, looking towards Mother C, Practitioner 2 and me during the massage activities. At the time of the sessions, he was approximately 9 months old, so was more physically active than the younger babies who participated in the infant massage at Site 1. To support Baby C's needs,

Practitioner 2 provided a range of children's centre toys which he seemed to enjoy playing with during the massages (Rouse, 17/06/16, Field Diary).

The first experience of massage appeared to be particularly positive for Family C. Throughout the session, Baby C appeared happy, and exchanged smiles, coughs and vocalisations with his mother. Mother C put oil on her hands, and, guided by the infant massage practitioner, asked for Baby C's assent. As Baby C felt the oil on his skin for the first time, he smiled and laughed with his mother. It was a shared and joyous moment between them; I described this initial response, and their high levels of ongoing engagement as 'magic moments' (Rouse, 15/06/16, Field Diary). It was significant that Baby C appeared relaxed and happy to participate in extended periods of massage at both Sessions 1 and 2; the family massaged together for just under 30 minutes during the first session, and just over 30 minutes at the second.

To support project transparency and the family's agency in the project, at the end of Session 1 I suggested that Mother C might want to watch back some of the film using the small screen on the reverse of the camera. Mother C said she wasn't sure about the camera angles in the footage, and we agreed we would try a different angle in the next session. Furthermore, at Session 2 Mother C asked me to pause filming as she had hayfever (Rouse, 13/07/16, Field Diary). I see these as positive indicators that Mother C felt that the research activity was jointly constructed, and had the confidence to inform me of her views and wishes.

The family reported positive effects of massaging together; as they left Session 1 Baby C was awake and appeared cheerful, and Mother C said that she felt relaxed (Rouse, 26/5/17, Field Diary). At Session 2, Mother C said that they had been doing some massage at home and felt that Baby C was sleeping better. Additionally, she said that she thought that Baby C's legs were stronger and he was more confident standing. Indeed, at the end of the session, he was standing up, leaning against the side of the sofa (Rouse, 17/07/16 and 14/07/16, Field Diary). White (2014) claims that stimulating bodily experiences encourage physical confidence; this is discussed further in Chapter 7, Section 7.2. Family C's interaction throughout their massages appeared very positive; Baby C and Mother C exchanged vocalisations and seemed to enjoy shared moments. Mother C also appeared confident in her touch with Baby C, massaging him 'firmly'. I also noticed that Baby C appeared deeply relaxed as his mother massaged the backs of his hands; his legs were draped over Mother C's thighs, and his whole body appeared at ease (Rouse, 13/07/16, Field Diary).

The following vignette episode highlights the massage context as a protected space for dyadic interaction. Baby C was 9 months old at the point of filming; it appeared that Family C's attachment was already well developed, and that Mother C respected and viewed Baby C as a capable communicator, using 'coughs' to initiate and sustain dialogues with others. For families with younger infants, and at an earlier stage in the dyadic relationship, the massage environment could offer important opportunities to notice and appreciate the multi-modal nature of infant communication demonstrated by Baby C, incorporating body posture, eye contact, and a range of vocalisations.

5.3.5.1 Vignette episode – Family C

Massage supporting dyadic interaction opportunities

Individual massage session – Session 1 (Filming Session 1)

Barcode: **FC:IM1-2-1:VR:1a/a:S2:LR:150616**

Timespan: 03:01- 5:30 minutes

Whilst putting massage oil on her hands in readiness for the next phase of activity, Mother C turns her head away and coughs. Baby C is holding and playing with the massage oil bottle, and appears to cough in response. Mother C makes her eyes and mouth wide and coughs. Maintaining eye contact, they exchange coughs and smiles and Mother C begins to massage Baby C's legs from the hips to the ankles. Baby C glances to the side towards the camera and researcher, and back towards Mother C. Hearing Practitioner 2's voice and laughter, Baby C looks over his shoulder towards her and makes laughing and breathing sounds. Mother C again opens her eyes and mouth wide, and makes vocalisations as she continues to massage Baby C's leg. They maintain eye contact and laugh together. Practitioner 2 asks Mother C if she has used massage at home and Mother C says that she has used the techniques after Baby C's bath, although *"…not like that…"*. Mother C continues to massage the length of Baby C's legs, incorporating his feet as Practitioner 2 talks about oils and massage at home. Baby C looks towards the camera and begins to make laughing and coughing noises. Mother C asks Baby C: *"Pappy…happy?"* Practitioner 2 then explains the next series of knee strokes as Baby C continues to laugh, cough and smile at Mother C. She begins the knee strokes and Baby C taps his stomach with his hands, rolls to the side towards her

ankle, and chews the oil bottle. He then looks towards the camera and laughs. Mother C also laughs, and Practitioner 2 asks if Baby C is finding it funny. Mother C says: *"I think so."* Baby C continues to laugh and cough. Practitioner 2 asks: *"Are you laughing, [Baby C]? Is that a laugh or a pretend cough?"* Mother C explains: "*He does a pretend cough…because when he cough, I say 'AAHH!...'…He want that attention."*

At the time of filming, Mother C was working in a role with varying shift patterns, and the individual sessions were designed to work around the family's routines. Whilst the sessions did not offer the peer interaction opportunities that Family A reported in the group context, they did offer an environment tailored specifically to the needs of Family C, and one that could support a more gradual introduction to massage. Indeed, considering the group and individual massage experiences of Family B, discussed in (Sections 5.3.3 and 5.3.4), it would seem that for some families, individualised sessions may offer a supportive alternative to an overwhelming group format, thus permitting the dyad to focus exclusively on their shared interaction. In this vignette episode, Baby C's drive towards playful engagement, rooted in a deep human need to build meaning with others (Trevarthen, 2001; Trevarthen 2011) seems very evident.

5.3.6 Early co-interpretation of video with Families A and B

Having completed filming sessions with Families A, B and C, the next step was to transfer families' footage to flashdrives, and to ask if they would like to participate in early co-interpretation of their films. It is a technique promoted by Tobin, Mantovani

and Bove, (2011) (Chapter 3) and the National Institute for Health and Care Excellence (2018) (Chapter 7) with the aim of eliciting views and observations, and promoting parent reflection on caring behaviours. Family C opted not to take part in this phase of the activity, but Families A and B said that they would like to participate. For data security and to allow families time to watch their footage should they wish to, I hand delivered the flashdrives to each family approximately 5 days before the arranged sessions, accompanied by a set of prompt questions for them to consider in conjunction with the footage (Appendix 21). Both families opted for a home visit to complete the activity, which was arranged for a time that fitted with their routines.

The first home visit was with Family A, who seemed keen to discuss their films at length. Mother and Father A were able to be at the session, and I noted how deeply they had considered the prompt questions. Indeed, Mother A had made a set of notes which she talked through as we watched the films together (Rouse, 23/05/16, Field Diary). It appeared that the use of video as a data source and prompt was a supportive one; it seemed to provide Mother and Father A the affirmative opportunity to observe the unfolding dyadic relationship across the weeks of the group (Rouse, 23/05/17, Field Diary), and to make detailed observations of Baby A's development. Furthermore, it gave Father A (who had been unable join the group due to work commitments) the opportunity to witness elements of the infant massage experience, and to see and comment on Mother A's increasing confidence across the weeks.

The home visit with Family B was also a fruitful one. Sensing that Mother B may be feeling a little tentative, I initially shared a few of my observations, such as her gentle touch and positive and expressive face-to-face interaction with Baby B. Mother B began to talk about her observations of Baby B, noticing his anticipation of the massage, and his improved relaxation during the individual massage sessions. This, as Tobin, Mantovani and Bove (2011) suggested, gave way to a discussion in which she spoke of the 'isolating' experience of being in a group with an unsettled child and possible links with her own stress levels. It seemed to me that the co-interpretation sessions were extremely valuable activities for the families, providing opportunities to observe, learn from and reflect positively on their experiences, and for Father A to access elements of the experience. For Mother B, it appeared to facilitate new observations of Baby B's learning and development, the interaction between infant and carer stress, and to share a difficult group experience.

5.4 Individual interviews

I had originally anticipated that infant massage practitioners would be involved in the focus groups of early years staff associated with the participating children's centres (Section 5.5). However, having reflected further on this, I decided that a group format may prevent the depth of experience of the infant massage practitioners being revealed, and decided to use individual interviews in addition to the focus groups.

Developing the interview questions

A critical aspect of preparing for the individual and focus group interviews was the development of a set of interview questions derived from the main research question and sub-questions (Chapter 1, Section 1.3.3). Following the guidance of Krueger (1998) that the most effective questions are best developed over time and with others, I arranged a working session with a PhD colleague and qualified infant massage practitioner to develop a set of open questions that connected with the central research questions. The questions were also shared with my supervisory team for comment, and redrafted in response. I also took influence from Liamputtong (2011) who suggests a series of warm-up questions are used. Having observed this structure used to positive effect by another PhD colleague in a focus group, I decided to use a version of this structure for the individual interviews and focus group questions (Appendices 4, 5, 6 and 22).

Individual interviews

I arranged interviews with the following infant massage practitioners who were identified through participating sites and professional contacts:

Site 1 - Practitioners 1 and 3

Site 2 – Practitioner 2

Site 2P – Practitioners 4 and 5

Practitioner 6 - Independent infant massage practitioner

Practitioner 7 – Holistic therapist and cultural practitioner of infant massage

The interviews – key reflections

My expectation had been that the interviews with practitioners would be individual. However, as I arrived at Site 1 to work with Practitioners 1 and 3, we discussed the logistics of the interviews, and the possibility of being interviewed together and responding to each other arose organically. As the practitioners were peers, and previous observations of their joint working practices had not highlighted any power issues, we went ahead with this amended format (Rouse, 23/05/16, Field Diary). The paired interview approach appeared to be a more efficient use of the practitioners' time, and provided them with an opportunity to collaborate. It was also the format of choice for Practitioners 4 and 5, and although Practitioner 4 had line management responsibility for Practitioner 5, I had observed only a deep mutual respect between them. Practitioners 2, 6 and 7 were interviewed individually as sole professionals in their respective contexts.

The interview sessions were audio recorded with participants' explicit permission, and the aim of this was to minimise the need for note taking and to allow the discussion to flow around and through the questions posed. Furthermore, it was important to this study that practitioners were allowed time to reflect on the questions they would be asked in advance of the interviews and focus groups. I therefore sent copies of the proposed questions to participants via email ahead of each session. This, I felt, adhered to the overarching epistemological stance of the study; that knowledge was co-constructed *with* participants, and that power was shared. This elicited a range of interesting responses; Practitioner 1 drew together a pack of supporting information to inform our discussions, and Practitioners 6 and

7 both chose to lead me through the questions which facilitated more naturalistic dialogues. Additionally, Practitioner 6 had produced a set of written responses to the questions posed. Other practitioners opted to respond to the questions on the day. Schon (1983) named this capacity 'reflection-in-action'.

A key learning point for me in the interviews and focus groups was around limiting the number of questions posed. Indeed, in this study, both types of session were lengthy, ranging from 1 hour 27 minutes to 1 hour 54 minutes. Moreover, Barbour states that questions posed in focus groups should be concise, and notes: "*New focus group researchers…need to be convinced that a few brief questions and well-chosen stimulus material will be sufficient to provoke and sustain discussion." (2007, p.82)* This was certainly my experience, and in future work I will ensure that a smaller and broader set of questions are used.

5.5 Focus groups

The research design included the facilitation of two focus groups through the participating children's centres; Sites 1 and 2. The intention was to elicit the views and perspectives of a wider group of early years professionals who had a special interest in, or referral role around, supporting families to participate in infant massage services offered through the two sites. It was my view that the children's centres were best placed to identify the practitioners that were integral to the infant massage provision in their area. I arranged discussions with the project leadership contacts at each site, where we considered colleagues who may be approached with a view to contributing. This was a form of 'snowball sampling', a subtype of

purposive sampling, where existing research participants identify new participants, and is particularly useful when the population is unknown to the researcher (Robson, 2011). Those considered included: 1. Key referrers (health visitors, midwives, and children's centre staff). 2. Children's centre leadership and those with a strategic view of the aims and outcomes of service provision. We agreed that the project leadership contacts would identify and approach participants, sharing an explanatory email outlining the focus of the research, and decide on a convenient date and time for the session.

Planning and preparing for the focus groups

I felt a level of anticipation about facilitating the focus groups as they required a number of skills: 1. Co-ordinating a balanced group where participants were encouraged to have a voice if they chose to. 2. Guiding the group through a series of probing questions designed to elicit rich responses around the effects of infant massage. 3. Making a written record of participants' responses alongside operating audio and video recording equipment. I was keen that participants felt comfortable in the group setting, and able to contribute their experience and expertise on their own terms. Indeed, Hennink (2007, p.6) states: *"A key ingredient to successful focus group discussions is the development of a permissive, non-threatening environment within the group…"* Barbour (2007) suggests that focus groups are co-facilitated by two practitioners where possible. As there were many elements to consider, this seemed logical. For the first focus group I was able to arrange for a colleague to support the session, however this was not possible in the second group which made the session more challenging to co-ordinate.

As with the infant massage practitioner interviews, the proposed session questions were sent via the participating sites to the practitioners who had agreed to join the focus groups. The questions were again linked strongly to the main research question and sub-questions and developed in consultation with colleagues. Previous experience through the infant massage practitioner interviews had shown me that an overly extensive set of questions could risk the session feeling arduous and repetitive for participants and researcher alike. I therefore used the following structure suggested by Liamputtong (2011): 1. Opening introductions. 2. Introductory question. 3. Transition question (using visual stimuli). 4. Focused questions. 5. Summarising question.

Using a technique recommended by Barbour (2007), I incorporated 'stimulus materials' into the session plan; six images depicting a range of infants and carers sharing massage. Additionally, an infant massage doll, massage mat and oil bottle were set up at each site. The materials were accompanied by the transition question*: "What are your first thoughts when you see these images and objects linked to infant massage?"* (Appendix 22) The intention was to ease the focus group participants into the session, and to promote thoughtful discussion around the infant massage experience. Barbour (2007) suggests that the technique has three main attributes, namely as a useful icebreaker and to generate humour, as a stimulant for discussion, and to compare across groups. It was also important to consider the physical comfort of the group. As it was expected that the sessions would last for approximately 90 minutes, we needed to consider providing snacks and drinks. Barbour (2007) suggests that we give this careful thought, as religious beliefs, food allergies, and sound recording interference caused by crunchy snacks need to be

considered. The focus group at Site 2 occurred during Ramadhan, and a significant proportion of the anticipated participants were practising Muslims, so the question of food and drink needed to be approached with sensitivity. I asked the children's centre leader to approach the practitioners for their views, and responses were that they were happy to have drinks and snacks in the room for other participants. We decided to place them discreetly at the side of the room out of respect for practitioners who were fasting.

Focus groups at Sites 1 and 2 - reflections

The focus groups held at Sites 1 and 2 were, in my view, a forum for rich and collaborative discussion, with the stimulus materials generating some powerful contributions. Furthermore, I observed occasions at both sites where practitioners built new knowledge and understanding together through discussion (Kamberelis and Dimitriadis, 2011) The groups were very different in composition; the focus group at Site 1 was made up of a range of senior leaders whilst the group at Site 2 was comprised of infant massage and family support staff (Diagram 3). However, across the groups and sessions there was a deep sense of respect for others, which appeared to contradict Robson's (2011) warnings of the potential for power struggles. Barbour (2007) cautions us that participants in focus groups may be tempted to overstate the examples given, and whilst I did not witness any examples of this, the risk was offset through the triangulation of methods and participants. As a further illustration of my careful examination of the focus groups, a detailed description of the group at Site 1 is located in Appendix 23.

5.6 Creative activities – participating families' experiences of infant massage

The project design included a proposal that families would produce an artefact which represented their experience of infant massage. As I planned the study, I anticipated that families would produce collages. The use of visual imagery to explore and express feelings and experiences in research is a technique suggested by Parsell, Gibbs and Bligh (1998). However, I was aware that I had a leaning towards the visual arts and did not want to influence families to focus on this medium unless it was their preference. I decided to allow this to emerge through discussion as we worked through the earlier stages of the project. Families A and B opted to participate in this phase of the research, and Family C decided that due to the birth of their second child, they would not take part.

5.6.1 Family A – electronic photo collage

In the course of discussions at the infant massage group and home visits, it emerged that Family A were keen photographers, regularly participating in themed photo competitions with the wider family. I therefore suggested that Mother and Father A considered taking a series of photographs to describe the family's experience of infant massage. We agreed that they would think about this, and, at Father A's suggestion, arranged a further home visit just under 7 weeks later to discuss their completed artefact. Father A asked me to put together a set of prompt questions to provide a framework for their activity. I drafted up an overarching question and supporting questions which were linked to the main research question and sub-questions:

Main question: What impact did baby massage have on your family?

Sub-questions:

What was the experience like for you and your baby?

How would you describe it to other people?

What difference did it make?

Did it help you at all? If so, how?

Were there any parts of the experience that were difficult?

The questions were emailed to the participating families, aiming to support them to consider and describe the shared experience of infant massage, and to identify any changes or differences that the practice may have supported. It was also important to ask families about the challenges associated with the experience; a critical question if we intend to improve the services offered to families.

At the follow-up home visit, Family A presented their choice of expressive activity; an electronic photo collage comprised of carefully selected and captioned photographs of Baby A which illustrated the effects of massage. With the family's permission, this part of the session was recorded, and Mother and Father A led me through their collage, explaining the choices of photos and captions, and their views on the difference that infant massage had made. My observations were that this was an effective approach, supporting families to articulate a very individual and complex infant massage experience (Krueger, 1998). Additionally, the way in which it was interpreted for this study encouraged families to take agency if they wished, leading the discussion around the artefact.

As the session drew to a close, I shared a flowchart with the family which visually mapped out the remainder of the project, providing a sense of where the fieldwork was heading, timescales and remaining activities (Appendix 24). The aim of this was to prompt a discussion around withdrawing from the fieldwork. I was mindful that at the project outset I had spoken with families about an anticipated fieldwork phase of 3 to 4 months, and at the point of this home visit it was approximately 5 months since our introductory meeting. The flowchart appeared to be a useful tool through which to have this discussion, and to support informed choices. Mother A said that she would be returning to work in the coming months, and prior to this Baby A would be beginning his transition visits to nursery (Rouse, 07/07/16, Field Diary). Additionally, my interpretation of her non-verbal responses was that she was beginning to get ready to disengage. We agreed that she would consider the point at which she would like to withdraw from the project and would then let me know.

5.6.2 Family B – storyboard collage

Dialogues with Mother B had revealed that she enjoyed writing and poetry, and had experience of assembling collaged mood boards through a previous job role. We also discussed the possibility of producing written pieces and paper collages, and agreed that Mother B would think further about this. To support these activities, I delivered a range of materials such as coloured paper and card, photos generated due to an ‘operator error’ during an individual massage session, glue, pencils, and felt pens. However, in the following weeks of email dialogue, I sensed that Mother B was experiencing difficulties getting started with the activity. Having taken advice from a storyboarding specialist, I suggested a joint collaging session, based at

home or using a children's centre room. Mother B agreed and said she would prefer to have the session at Site 1.

Shared collaging session

Meeting with Family B at Site 1, I noted Mother B's assuredness in caring for her son: *"They appeared very attuned to each other – synchronised, they understand each other."* (Rouse, 19/08/16, Field Diary). There had been, in my view, a clear shift across the time we had worked together, and this is explored in the analysis of Family B's data and vignettes in Chapter 6 (Section 6.4.2). We had been allocated a large room at the children's centre, which I set up with a range of collaging resources including a selection of donated magazines, and wallpaper samples, coloured paper and card, glue sticks, and marker pens. Practitioner 1 laid out a heuristic play area for Baby B, and Mother B brought with her a selection of parent and baby magazines, and the resources I had delivered the previous month. We sat on the floor together; Mother B began to work on her storyboard collage, and I started to build a collage documenting the context to my PhD. This approach to storyboard collaging appeared to offer the participating family a supportive environment to begin work on the activity.

Early the following month, I visited the family at home to discuss Mother B's completed artefact (Photograph 3, which follows). With her consent, we made an audio recording of the session; Mother B talked about the collage, and the choices she had made around the images, colours and words representing the family's experience of massage. Again, the activity also acted as a starting point for broader

reflection (Tobin, Mantovani and Bove, 2010); Mother B suggested there was a need for a more representative sample of family experiences in children's centre information relating to infant massage. She felt that this could offer important encouragement to families to join infant massage groups, and to persist when things were more difficult. It appeared that the collaging activity followed by a guided discussion was again an effective method, providing an adaptable opportunity for expression through visual, written, and discursive means. It is also a method, in my experience, that requires that the researcher builds in time for families to reflect on their experiences, and to develop their artefact. Allowing time for reflection is suggested by Gauntlett (2007), and it is my view that this, in conjunction with techniques such as storyboarding, facilitates rich expression.

As the session drew to a close, Mother B said that she would like to participate in the final stages of the research; answering the context questions, and also doing some further shared analysis of shorter sections of video (see Appendix 25). Whilst we were unable to complete the second analysis activity at our close of fieldwork visit due to Baby B's care needs, it is noteworthy that Mother B indicated an interest in the longer term life of the project. I interpret Mother B's engagement with the study to be linked to two main themes: 1. She felt that the project, focusing on infant massage as a tool to enhance early attachment relationships was needed. 2. Due to the respectful way in which the project aimed to work *with* participants, Mother B knew she had agency, and that the contributions made by her family were integral to the study. A detailed exploration of the activity around Family B's storyboard collage can be found in Appendix 26.

Photograph 3 – Family B: collage

5.7 Generating the family context descriptions

5.7.1 Aims

The family context descriptions were intended to offer the reader some detail around the circumstances of the families who had participated at the deepest level; Families A, B and C. It was vital to me that the prompt questions (Appendix 27) were carefully designed, allowing families the space to share what they felt comfortable with, and that they were assured of their right to opt out of answering the questions altogether. It was also critical that they were developed from, and linked strongly to, the central research question and sub-questions. Lastly, I believed it was important to develop a rationale for asking each question. I am aware that a feature of our daily lives is that data is 'collected' from us, often without an explanation of the reasons around why it is needed. Therefore, I linked each proposed question to the research questions, and to clearly articulated reasons for asking for this information. This was presented in the form of a rationale diagram (Appendix 28), which Mother B was keen to see before answering the questions.

The timing of putting these questions to families was something I considered carefully, as in my view there would need to be an established working relationship before this activity was completed. Due to the referral processes at Site 1 in particular, it was not possible to develop attached working relationships with Families A and B in advance of the first research activity, the filming. This developed through and during filming and subsequent home visits to co-interpret video, and to complete the creative activities. With regard to Family C, an emergent

working relationship was developed through my visits to the baby group at Site 2. It seemed prudent to locate the family description activity towards the end of the fieldwork phase.

5.7.2 Gaining feedback on the questions

The phrasing of the questions, and the information they aimed to elicit needed to be thoroughly considered. I therefore shared an early draft of the questions with my supervisory team and two peer researchers. This generated some useful feedback which supported the development of the questions, and a consideration of maintaining appropriately enquiring yet boundaried questioning. For example, Peer 2 suggested that I consider asking questions around families' physical and mental health needs, employment and benefits status, housing, and involvement of other agencies. Whilst I appreciated that this information could add depth to the family descriptions, my belief was that the data requested needed to link directly to the aims of the project and research questions, and should not probe too deeply into families' lives in respect of their health and economic wellbeing. I felt strongly that the quality and breadth of the questions was strengthened through the dialogue with my peer colleagues and supervisory team. This was a truly Vygotskian (1978) collaborative effort, connecting with the overarching spirit of this study.

5.7.3 Working with families to develop their context descriptions

It was important to work around the families' individual preferences as to how they would like to answer the family description questions. Indeed, each of the three participating families opted to respond in an individualised way, which I interpret as a clear sense of agency in the project. Indeed, Family A opted to answer the

questions sequentially using the question template, Mother B drew together a description prompted by the questions, and Family C opted to answer the questions in person, with the researcher as scribe. I then suggested that the proposed drafts of their descriptions could be shared with them for checking and editing before being added to the thesis.

It must be highlighted that whilst discussing the family description questions, Mother C stated that she *did not* agree that the family could be described as 'facing challenge' at the point they engaged with the individual infant massage sessions. However, she said that the pressures occurred after the birth of their second child. The family had been identified by the children's centre leader as facing challenge, and at home visits outlining the research project and to complete consent paperwork, Mother C appeared to understand the focus of the research. It is possible that the delay between initial meetings and arranging the individual massage sessions meant that the pressures experienced by Family C had passed. Indeed, thinking of the discussions with Families A and B, it seems that life challenges can ebb and flow. It is also worth considering that 'life challenges' as perceived by children and family services, and government and local policymakers may not always correlate with families' own perceptions of the pressures they face.

5.7.4 Ending visits

The significance of 'endings' was the focus of an important discussion with my supervisory team. Due in particular to the attached research position (Formosinho and Formosinho, 2012) through the fieldwork stage, we agreed that there was a

need to build in endings with each of the families who had participated at the deepest level (Families A, B, and C). They would mark the close of the fieldwork stage with families, and clearly signpost the beginnings of the home-based analysis and writing up stage. I decided that a suitable option would be a home visit to thank families in person where agreed, to deliver a thank you card, and to explain the next phase of the study and offer progress updates. This would give a clear conclusion to the more regular contact in the fieldwork stage, and also allow a space for families to be thanked for all that they had contributed. I arranged to visit Families B and C at home, combining their ending visits with final fieldwork activities. However, Family A had concluded their participation at the point where they shared their responses to the family description questions. As Mother A had returned to full time work and Baby A was in nursery, I decided that it would be most appropriate to post a thank you card to their home address.

5.8 Questionnaire phase

The questionnaire phase was designed in response to an acknowledgement of the limitations and potential criticisms of this qualitative study; that the experiences of three families, although in-depth, could not be assumed to represent those of a wider group. I would contend that the detailed exploration of the experiences of a small group of families was 'illuminating' of a broader population (Denscombe, 2010) and, transcending the individual challenges faced by the smaller (case study) and wider (questionnaire) groups, *all* participants were adjusting to parenthood. However, it was also important to acknowledge that families' encounters with infant massage would be interpreted through the lens of personal experience. I

anticipated that some themes emerging from the data would be shared across Families A, B and C, *and* across the group of families who agreed to participate in the questionnaire phase, whilst other themes would be very individual; an experiential Venn diagram.

Applying learning from the experiences of facilitating focus groups and individual interviews, I devised a short set of five open questions to put to a wider group of approximately twenty families, and an accompanying project information sheet (Appendices 7 and 29). I also designed a criteria sheet to support children's centres to carefully identify potential participant families (Appendix 18). My original expectation had been that questionnaires would be completed through children's centres across the Midlands. However, as the fieldwork progressed, it became clear to me that participating sites needed, from an ethical standpoint, to fully trust and understand the aims of the research in order to approach potential families. I therefore spoke with Sites 1 and 2 about this, and both settings were keen to support this phase of the study.

Eighteen questionnaires were completed through the children's centres linked with Site 1, through Site 2, and two partnership children's centres. Families participated in two ways; the majority completed the questionnaire by hand, and for a small group, via a phone conversation with a practitioner as scribe. Whilst I agree with McClean (2006) that there is a limit to the detail that can be provided in a questionnaire, and that it may also present a barrier to those with literacy issues (Aldridge and Levine, 2001), this phase aimed to build a broader picture of families'

experiences having already developed three detailed case studies. It was also suggested that participating sites offered families a range of completion options including the practitioner as scribe. However, it is possible that practitioner capacity limited the offer of this option.

5.9 Summary and critical reflections

This chapter has provided a comprehensive account of the central methods used in the fieldwork stage of this research project. A critical element of this stage has been a reflexive approach to the implementation of the anticipated methods; working *with* participants to shape them around individual needs and preferences. In turn, I believe that this led to participants' perceptions of agency, their sustained investment in the project, and to the strengthening of the methods through adaptation. Through this chapter, the narratives of Families A, B and C have been developed; through the observations of filming (Sections 5.3.3, 5.3.4 and 5.3.5), the detailed vignettes (Sections 5.3.3.1, 5.3.3.2 and 5.3.5.1), and the co-interpretation of footage and creative activities phases (Sections 5.3.6, 5.6.1 and 5.6.2).

Another important theme running through this stage of the study has been around the development of the questions for the individual interviews, focus groups, family descriptions and questionnaire phase. I have learnt: 1. It is critical that the questions posed link strongly to the original research questions. 2. The breadth and openness of questions seems to contribute to richer discussion. 3. Using fewer questions facilitates a more naturalistic discussion. 4. That designing effective sets of questions is a skill, requiring practice and feedback.

I also believe that a significant thread running through this study is one of researcher self-awareness. Throughout the project, and particularly in the fieldwork stage, I documented my interactions, decisions, and reflections in field diaries and reflective journals. This ensured that I remained highly aware of my conduct as a researcher, the contributions and responses of participants, and consequently the unfolding study. Moving forwards, Chapter 6 will address the key decisions and processes around the mapping, coding and analysis of the data, and building further on the detail of the experiences of Families A, B and C described in this chapter, will introduce their fine-grained case studies.

Chapter 6 – Coding, analysis and identification of the key themes

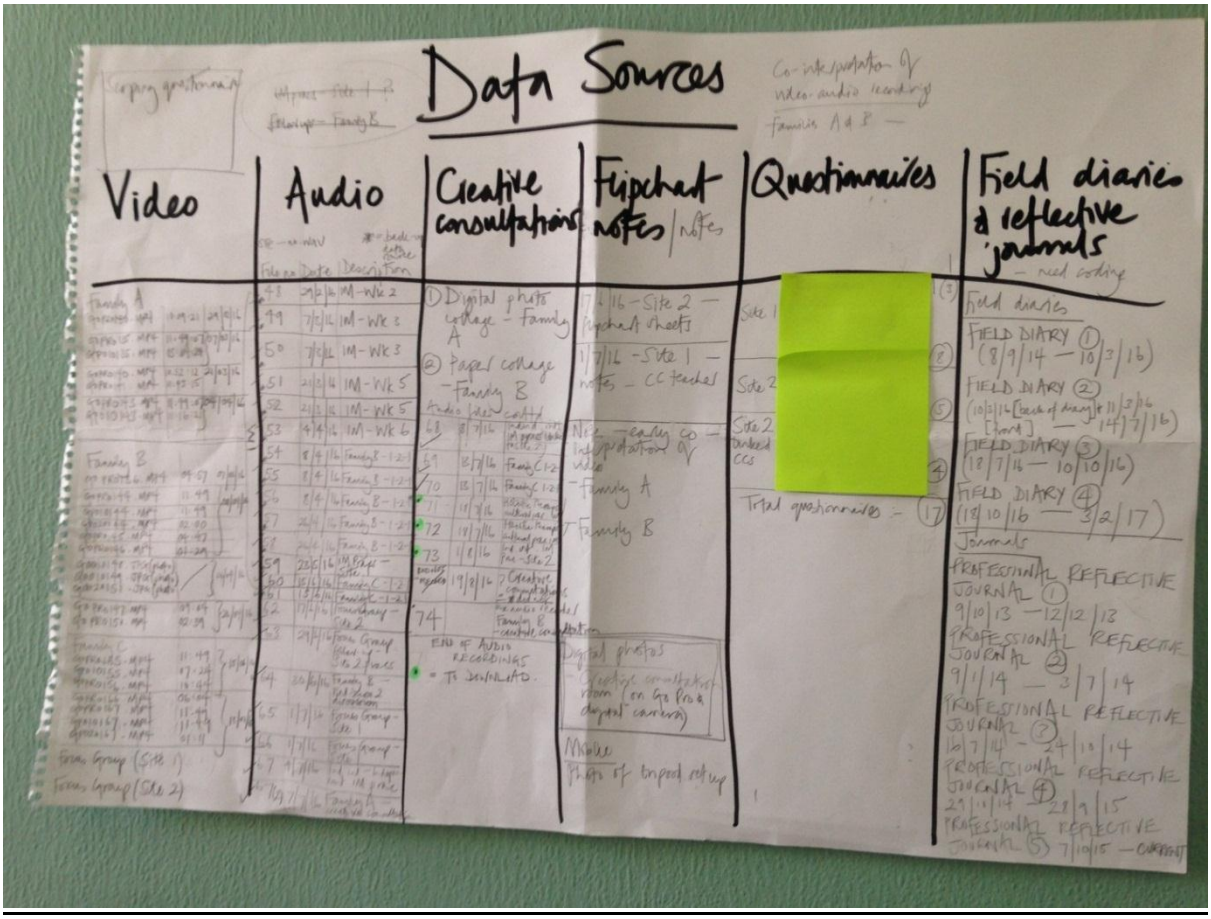
6.1 Introduction

Moving forward from Chapter 5 which documented the fieldwork activities, Chapter 6 charts the central decisions and activities linked to data coding, analysis and location of the overarching themes. First, the mapping and 'barcoding' of data, design of coding frames, and decisions around approaches to analysis are examined. Next, the three stage coding process used to refine the data and themes is explained. The data analysis is then presented in three sections: 1. The case studies portraying the infant massage experiences of Families A, B and C. 2. The themes collated from the interviews and focus groups with practitioners. 3. The analysis of the questionnaires completed by a wider group of families facing challenging circumstances. Finally, looking across the data sources, the overarching themes are identified.

6.2 Sorting, coding and early analysis of the data – approaches and methods

The range of methods used in the fieldwork stage of this study (Chapter 5) generated a broad set of data including video and audio footage, co-interpretation notes, digital and paper collages, and questionnaires. There were also supporting documents such as focus group notes, field diaries and professional reflective journals. I needed to make sense of it to ensure a structured coding and analysis phase, and a clear audit trail for readers of the thesis; a marker of trustworthiness (Lincoln and Guba, 1985). To gain an overview of the data, an important first step was to map the data sources visually (Photograph 4, which follows).

Photograph 4 – Draft data map



6.2.1 Mapping the data and developing unique identifying ‘barcodes’

Mapping the data

The draft data map aimed to give an overview of the data generated through the fieldwork phase. The data sources and supporting documents were grouped under the headings: ‘Video’, ‘Audio’, ‘Creative consultations’, ‘Flipchart notes / notes’, ‘Questionnaires’, and ‘Field diaries and reflective journals’. Relevant information such as source description, device reference number, file duration, and date were linked to each piece of data. For example, a video file recorded with Family B had a reference number GOPRO136.MP4, was 4 minutes 57 seconds in duration, and was recorded on 07/03/16. The information from the draft map was then transferred to an Excel spreadsheet (Appendix 30), audio file durations added, and the data categorised as either ‘primary’ or ‘back-up’. The intention was that the primary sources would be coded, and back-up files used only where there were primary source quality issues or technical failings which could affect coding and analysis.

Generating the barcodes

Unique identifying ‘barcodes’ were generated for each piece of data, a ‘tagging’ technique recommended by Pascal and Bertram (2015b, p.1), who suggest:

> This should make it clear to anyone who follows your research when, where, from whom, by whom, and how the data was collected. This allows an audit trail of your research to be undertaken if required which will aid trustworthiness and credibility.

Each barcode provided information pertaining to the participants, the location or context in which the data was generated, the data type and position in the sequence of data sources, the participating researcher, and the date generated. Below is an example of one of the barcodes generated:

FA:IMG:VR:1/5:S1:LR: 290216

This barcode relates to a data source generated with Family A **(FA)**, through an infant massage group **(IMG)**, is a video recording **(VR)** which is the first of five **(1/5)** at Site 1 **(S1)**, recorded by Liz Rouse **(LR)** on 29/02/16 **(290216)**.

6.2.2 Designing coding frames

An important step in the early sifting of data was to narrow down and identify the sections warranting more detailed exploration. I turned to Roberts' PhD thesis (2007) where early coding and analysis included the development of 'clip logs' for each of the audio and video recordings produced through the fieldwork. On each clip log, information was recorded about the participants, location, data type, date, and interest level (1 – 5), as well as 'a priori' (pre-planned) codes, and notes around the researcher's perceptions of recording's importance, concerns or other issues. Roberts (2007) stated that this enabled the key information to be understood 'at a glance' and with the aim of developing a standardised data storage and location system.

Using Roberts' (2007) example as a basis, I began to develop my own variation; 'Phase 1 Coding Framework – Video and Audio Data Sources' (Appendix 31). Whilst I appreciated the utility of the 1- 5 grading scale, I did not agree with the

wording for the category descriptors. Gradings 1 – 3 seemed negatively phrased: "*1 = discard, 2 = interesting but irrelevant, 3 = relevant but ordinary*…" (p.450). I felt strongly that I could not describe any of the video footage recorded in this project as 'ordinary'. Having completed early co-interpretation of the video footage with participating families, I saw the footage as documenting the rich and nuanced interactions between the babies and carers. I developed a new set of descriptors, inspired by Geertz's (1973) conceptualisation of 'thick description' in ethnographic research: *"1 = Less useful / contextual data (do not analyse), 2 = Of interest but less useful, 3 = Interesting and some use, 4 = Very useful, 5 = Very useful and 'thick' (Geertz, 1973)…"* (Appendix 31) Similar to Roberts' (2007) clip logs, the Phase 1 framework recorded tracking information about participants; the data source, total running time, reference numbers, and the identifying barcode. Notes and information were recorded under the following headings: 'Timespan', 'Emergent themes', 'Significance (1-5)', 'Further notes'.

6.2.3 Thematic analysis – decisions

<u>Transcription, coding and analysis decisions</u>

As I prepared for the coding and analysis stage of this project, there were key decisions to be made in three areas: 1. The approach to coding and analysis expected to work best with the data sources. 2. How the audio would be transcribed and the level of detail required. 3. Whether or not computerised data analysis software would be needed.

1. Coding and analysis

Coding is the first step in analysis; the process of grouping and naming data (Flick, 2014). It is defined by Charmaz (2006, p.43) thus: *"Coding means naming segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data …moving beyond concrete statements in the data to making analytic interpretations. …"* I would agree, adding that interpretation began *before* using coding frames; through field diaries, co-interpretation with families, and discussions with colleagues. Within the 'coding' (Miles and Huberman, 1994), or 'indexing' activity (Bryman, 2012), terms used to refer to the sections of data are wide-ranging, including 'databits' (Dey, 1993), 'segments' (Tesch, 1990; Miles and Huberman, 1994), and 'chunks' (Miles and Huberman, 1994). Whilst coding the data, it is suggested that the researcher writes 'memos'; these are usually informal notes which document the thought processes leading to the codes, also supporting the audit trail (Stuckey, 2015). My coding frame incorporated the headings 'Emergent themes' and 'Further notes', allowing the sections of data to be labelled, and memos to be recorded.

Thematic approach

The fieldwork had generated a range of very different qualitative data sources. This required a coding frame (Section 6.2.2) and approach which could be used with different data types and allow the themes to come to the fore. Additionally, I did not want to impose *"…too rigid a cage…"* around the data, which could prevent the researcher seeing the *"…interpretive possibilities beyond the logic of our codes. …"* (Adair *et al.*, 2016, p. 53). In my view, thematic analysis appeared to facilitate

responsivity to the data. This quality, alongside its simplicity and accessibility to the learning researcher and co-inquiring participants, and the ease with which the findings could be shared with others were highlighted by Braun and Clarke (2006) as clear strengths. This seemed strongly aligned with my research project. However, I was also aware that the approach has been criticised as lacking an 'identifiable heritage' (Bryman, 2012) or 'kudos' (Braun and Clarke, 2006) in comparison to other analytic approaches. Furthermore, the method's flexibility can allow a wide range of things to be said about the data, which risks overwhelming the researcher as they try to identify the sections requiring greater focus (Braun and Clarke, 2006). I was also aware that the project needed to provide a clear explanation of the analysis process used; Odena (2013) critiques researchers, who, whilst attempting to remain within word limits, provide little detail of their analysis, effectively leaving it hidden. Without this, we risk compromising the audit trails of our research, leading inevitably to questions about its trustworthiness.

Emergent or 'a priori'?

I also needed to consider whether the coding would be 'emergent' or 'a priori'; that the codes would either emerge from the data, or be 'pre-set' (Creswell, 2007). Stuckey (2015) states that 'predetermined coding' can be based around pre-existing theoretical concepts, as well as interview guides and research questions. I had completed the first phases of the literature reviews relating to intersubjectivity and attachment prior to entering the field, and through focus groups, individual interviews and questionnaires, I had posed specific questions to participants. It appeared that the coding in this study would fall somewhere between an emergent

and a priori approach. Indeed, Stuckey (2015) suggests that the coding process can be a combination of both predetermined and emergent codes, and Crabtree and Miller (1992) put forward the concept of a 'continuum' of analysis styles, ranging from objective and standardised to interpretive and subjective. My view was that the analysis fell towards the interpretive end of the scale; it could not claim to be purely emergent as it had been influenced by my prior conceptual knowledge, my research worldview, and the questions put to participants through the fieldwork.

2. Transcription

Having decided to use the thematic analysis approach in the analysis of the data, I also needed to consider my approach to the transcription of the audio and video material. Transcription is known to be a time-consuming process (Robson, 2011; Bryman, 2012), taking five to six hours (and potentially longer) per hour of recorded speech (Bryman, 2012). Additionally, whilst it may appear a relatively straightforward activity, it is an 'interpretive process', requiring the researcher to make decisions about the level of detail used, such as the inclusion or omission of non-verbal forms of communication, and in interpreting the intended meanings of words used and how the data is represented (Bailey, 2008). However, Robson (2011) states that whilst conversation and discourse analysis require highly detailed transcripts, this not the case for thematic analysis.

Reflecting on this, I decided to use an approach for the audio data which I describe as 'semi-transcription'; notes documenting the discussion which included both paraphrased (using participants' key words) and, where judged significant, verbatim

sections of text. Similarly, the video data was transcribed through notes for each 1 minute segment of data, describing the activities, actions, vocalisations and significant moments of speech. This was augmented by symbols where required, for example a wavy line to denote a musical vocal interaction with an adult.

3. Using computer software in the audio and video analysis

Another key decision in planning the analysis phase was whether or not to use computer software in this process. Whilst software programmes support the organisation and management of data (Robson, 2011; Stuckey, 2015), a common misapprehension is that they also code it, which is not the case (Stuckey, 2015). They are particularly suited to research team projects (Silverman, 2010) and can handle large amounts of data at speed (Silverman, 2010; Robson 2011). Moreover, they can assist with consistency in coding (Silverman, 2010; Robson, 2011) and rigour through frequency counts and cross data checks for 'deviant cases' (Silverman, 2010). Amongst the software options, I spent some time exploring the ELAN tool (Max Planck Institute for Psycholinguistics, 2018) as it claimed to be compatible with both video and audio data, and allowed the user to add unlimited annotations. Furthermore, Jadue-Roa (2013) had used the package in the analysis of video of young children's interactions in an early years setting, and stated that it enabled*"…the identification of multiple interactions that occur simultaneously…"* (p.198) These features seemed particularly relevant to the video data in this project.

However, this study was small scale, particularly in comparison to those such as the international 'Children Crossing Borders' project (Tobin, Mantovani and Bove,

2010). In this study, research teams worked across countries using HyperResearch analysis software where video-cued' focus groups alone generated one hundred transcripts (Adair *et al.*, 2016). The video footage that I wanted to analyse totalled just over 3 hours, and related to three families, as opposed to the sixteen child participants in Jadue-Roa's (2013) study. Moreover, Robson (2011) reminds us that developing skills in the use of software packages requires time and energy, leading some to believe that a thorough analysis has been completed, and to neglect the interpretation of the data. On balance, I decided to complete a manual analysis of the data sources; my view was that in this instance, my time was better invested in getting close to and becoming familiar with the data.

6.3 Coding and identifying emergent themes

The coding and analysis of the data took place across three phases, with the aim of progressively refining the data and themes.

6.3.1 Phase 1 coding

I originally anticipated that the Phase 1 framework (Appendix 31, outlined in Section 6.2.2) would be used to code the video and audio footage only. However, as I began to work through the data, I realised that with a minor amendment (swapping 'Timespan' for 'Question'), I could use the framework across the data sources, offering a consistent approach to this first stage of coding and analysis. For each data source, a corresponding coding frame was completed.

Video and audio footage

It was important to consider how the data sources would be chunked for coding and analysis. As stated in Chapter 5, the researcher Colwyn Trevarthen claimed that 27 seconds of video footage had provided sufficient data to form the basis of a theory (BBC Radio 4, 2014). With this in mind, and having seen the richness of the film during early co-interpretation sessions, I split the films into 1 minute sections for coding; 0 – 1 minute, 1.01 – 2.00 minutes, etcetera. The audio files were usually longer, with primary audio files ranging from 22 minutes and 13 seconds to 1 hour 54 minutes and 50 seconds in duration. I anticipated that it may take participants a number of minutes to explain a concept or theme, so the recordings were split into 5 minute sections; 0 – 5 minutes, 5.01 – 10.00 minutes, etcetera. Using the Phase 1 frame, each 1 minute (video footage) or 5 minute (audio footage) section was given a rating from 1 to 5, and the emergent themes, theoretical links, and any other meaningful observations were noted down. For the audio footage, detailed semi-transcription notes were made.

Creative activities

Families A and B participated in the creative activity phase relating to their infant massage experiences; Family A produced a digital photo collage and Family B a paper collage. Each family then took part in an audio recorded discussion which was prompted by their collage. To code this data, I listened to the audio recordings of the discussions whilst looking at the PDF (Family A) or digital photograph (Family B) of the collage, and made detailed semi-transcription notes of the dialogue.

Again, the footage was broken into 5 minute sections, notes or themes added, and a rating from 1 to 5 allocated (Appendix 32).

Questionnaire phase

For the questionnaires, the framework was used to assemble the responses of eighteen participating families to each of the five questions posed. The 'timespan' heading used for the video and audio coding was replaced by a 'question' heading and the answers to each question grouped, the emerging themes highlighted in different colours, an overall 1 – 5 rating assigned, and researcher notes added (Appendix 33).

Phase 1 rating decisions across the data sources

The vast majority of the data was rated between 3 (*"…Interesting and some use…"*) and 5 (*"…Very useful and 'thick' [Geertz]…").* Just three of the video sections were rated below 3, all scoring 1. Two sections related to footage where the participating babies became distressed, and one to the participating mother's phone ringing and the session ending. Out of respect for the participating families' privacy, the rating of 1 was allocated and the footage omitted from the next stage of analysis. Whilst completing Phase 1 coding, I found that a more nuanced rating system was required for the data in the 3 to 5 range, and introduced 3+, 4-, 4+, 4/5 (aspects of 4 and 5),and 5* (exemplary) to the system.

6.3.2 Phase 2 coding

Phase 2 coding aimed to further sift and compress the data and to begin to look for cross-data themes. At this stage, segments rated below 4- were omitted from further analysis. The Phase 2 framework (Appendix 34) was used for all data sources, and had four main headings: ‘Data source information’, ‘Location in data source’, ‘Theme(s), and ‘Notes’. The first two headings were for recording the tracking information; data type, barcode, and timespan or question number.

6.3.3 Phase 3 coding

The final stage of coding and analysis involved three strands of activity:

1. Transfer of condensed keywords / phrases and themes from the practitioner (paired and individual) interviews and focus groups to colour coded paper and sorting into overarching themes (Appendix 35).
2. Assembly of case studies for Families A, B and C – using family descriptions, coded video and audio data, collages and co-interpretation notes (Sections 6.4.1, 6.4.2 and 6.4.3).
3. Extrusion of key themes across the five questions in the questionnaire phase (Section 6.6 and Appendix 37).

6.4 Families’ experiences – the case studies

This section provides further detail relating to Families A, B and C. In a cumulative approach to the case studies, the three infant-carer dyads were introduced in the pre-fieldwork home visits in Chapter 4 (Section 4.2.5), and their experiences of

group, individualised infant massage, and co-constructed research were documented in detail in Chapter 5; in the vignettes (Sections 5.3.3.1, 5.3.3.2, and 5.3.5.1), and across Sections 5.3.3, 5.3.4 and 5.3.5. Having participated in filming whilst learning the practice of infant massage, Families A, B and C then chose to take part in some or all of the activities through which the infant massage experience was discussed: co-interpretation of video data (Section 5.3.6), collaging and storyboarding (Section 5.6), and family descriptions (Section 5.7). The data generated through these activities was used to build the cases that follow, and, following the logic of Denscombe (2010), provide further detail around the families and their very individual experiences of infant massage. It is anticipated that through this a deeper understanding of the influence of the practice will be developed.

The cases are structured as follows (with families' spoken or written words italicised):

a) A family description; using the family's own words as fully as possible. Stake (1995) states that the description of context is critical to building 'vicarious experiences' for the reader, and that where the case relates to a person, the home and family are significant contexts.

b) Two 'vignettes'; a 'vignette frame' which offers a second-by-second description and interpretation of a short section of video, and a 'vignette episode' where a minute-by-minute description of another piece of footage is presented. Stake (1995, p.128) suggests that case reports should include *"…one or several vignettes, briefly described episodes to illustrate an aspect of the case, perhaps one of the issues."*

c) Commentaries around the identified vignettes, linking to key research and other observations across the data.

d) An overview of the video generated with each family, and triangulating observations made by supervisors and colleagues.

e) A discussion of the themes identified by and with each family.

6.4.1 Family A

Family description (using **FA:FD:E:1/2:301016** and **FA:FD:E:2/2:211216**)

Family A opted to answer the family description questions in writing and via email.

The family unit consisted of Mother A, Father A and Baby A. Mother A was in her 30s and Father A was in the 35 to 40 years age range. Both parents described their ethnic group as White British. Baby A was male and the family's first child. He was born in November 2015 and was 14 weeks old at the beginning of the baby massage group. Mother A described her pregnancy as *'all fine'*. Baby A was born 12 days after the expected due date, and the early weeks after the birth were described as: *"Very hard, tiring and regular periods of feeling very low."* Mother A and Father A were the main carers for Baby A; the maternal and paternal grandparents lived some distance away, so *"…family support was not regularly there. …"*

Family A had no prior experience of baby massage before joining the infant massage group. Mother A stated that the sessions began as the challenges the family faced had subsided:

I joined the class when I was feeling a bit more confident. Plus my baby was starting to show development in movement and awareness of his surroundings, which was exciting. This did make massage a little tricky sometimes because he wanted to look / chat to other babies / people. When I was referred to the course I was feeling quite low and going through some health issues. Having this course to go to every week really helped as I could focus on somewhere we had to be (get out of the house).

Mother A's brother (a trainee chiropractor) suggested that the family meet with a chiropractor as soon as possible after Baby A's birth. Both parents had worked with chiropractors before, and had achieved *'positive results'*. *"It made sense to us that there may be benefits to a baby following what must be a traumatic experience of childbirth."* The family identified a local practitioner with specialist paediatric experience. Baby A's first visit was at 6 days old:

In this initial appointment [Practitioner Name] undertook a lot of testing of [Baby A's] range of movement using very gentle touch and stimulation. In this first visit [Practitioner Name] immediately improved his hip alignment and strength of suck. We have visited ten times since and on each appointment [Practitioner Name] has undertaken a number of gentle corrections to enable [Baby A] to physically develop unhindered by misaligned bones and plates. Compared to his immediate NCT peers [Baby A] has been the first to: roll over, happily have tummy time, crawl and now walk. I am convinced that the decision to use the services of a chiropractor has got a lot to do with it.

Identified vignettes

6.4.1.1 Vignette frame

Linking with the vignette episode in Chapter 5 (Section 5.3.3.2) which highlighted the social function of the group for Baby A, the following vignette frame provides a second-by-second description of 75 seconds of footage which, I believe, further develops our understanding of Baby A's drive to engage and interact with others.

Barcode: **FA:IMG:VR:2b/5:S1:LR:070316**

Timespan: 00:00 – 01:15 minutes

Key

BA = Baby A P1 = Practitioner 1 (infant massage facilitator)

MA = Mother A R = Researcher C = Camera

Table 4 – Family A: vignette

Timespan	Observations	What could this tell us?
00:00 – 01:10 mins	(*P1's voice can be heard in the background talking through permission and massage strokes).	Modelling permission and techniques
	MA asks BA for permission to massage – putting oil on her hands and rubbing them in front of BA's face.	Respect – asking permission, close observation of responses and cues
	BA is physically active – moving legs and hands, and appears to clasp his hands together.	Mirroring
	BA looks towards P1, then towards C (and R?), then towards MA as she massages his legs	Social interest, emerging triangular interaction, exploring from an emerging secure base
	BA looks towards P1 BA appears to hear another baby's vocalisation, and turns to look in that direction.	Responding to and participating in early dialogues with others
	BA smiles and vocalises x 2, puts thumb in mouth.	
	P1 "You've found your voice, BA!" (Other babies make vocalisations). BA continues to look in the direction of other baby, legs moving whilst MA massages.	Modelling appreciation of young babies' purposeful dialogues
	BA glances behind him towards families on the opposite side of the circle, then back towards the baby at the side, vocalising numerous times and moving his legs.	Interest in the wider group, initiating and participating in dialogue
	BA twists to look behind at the families on the opposite side of the circle.	Social drive supporting physical development
	MA attempts to adjust BA's position, and he appears to protest vocally. MA stops.	Respect for BA's vocal dissent

The footage highlights what appeared to be mirroring behaviour; Baby A seemed to replicate Mother A's hand gesture as she asked for permission to massage. Trevarthen, Kokkinaki and Fiamenghi Jr. (2010) claim that very specific imitation is a key feature of infant-carer interaction, and this occurs before the development of spoken language. Furthermore, throughout the film, Baby A appeared to respond to, and initiate, interactions with other infants; turning to look in the direction of their sounds, smiling, moving his legs, and vocalising. He was also able to engage with and alternate between a number of adults (Practitioner 1, the researcher, and Mother A), as well as an inanimate object (the camera), which could suggest triangular interaction (Fivaz-Depeursinge, Lavanchy-Scaiola and Favez, 2010) and emerging secondary intersubjectivity (Trevarthen and Hubley, 1978; Trevarthen and Aitken, 2001). It would also appear that Baby A's social drive and physical development were connected; his desire to engage with other group members seemed to motivate him to twist and roll over, an observation highlighted by Mother and Father A in the discussion of the family's themes.

6.4.1.2 Vignette episode

This episode documents part of the fourth and final filming session with participant families in the group. The footage was selected as I believe it portrays massage as facilitating Mother A's careful observation of Baby A, and supporting a multi-sensory articulation of her love. Moreover, it documents the appeal of the naturally musical tone of Practitioner 1's voice:

Expressions of love and engaging qualities of voices

Infant massage group – Week 6 (Filming Session 4)

Barcode: **FA:IMG:VR: 5a/5:S1:LR:040416**

Timespan: 01:01 – 05:00 minutes

Baby A is lying on his stomach, lifting his head, and kicking his legs. Mother A, guided by Practitioner 1, completes gentle strokes along Baby's length, starting at his shoulders and moving down his back and legs. Mother A then picks up Baby A and places him in a seated position, which allows him to observe and listen to Practitioner 1 as she gains input from the group relating to the next section of the massage routine. Mother A then places Baby A on his back. He chews his right hand and looks to the side, behind him, and towards the camera. He then vocalises, lifts his hips and holds his toes. Mother A applies massage oil to her hands, and brings them over Baby A's face to request assent to massage. This appears to attract his attention and he looks towards her. Mother A begins a rhythmic stomach massage, carefully observing his reactions. Baby A looks to the side, towards the camera, and then back towards Mother A. She smiles and leans over Baby A, supporting his ankles and gently stroking his chest. As the massage action pauses, Baby A rolls to his side, appearing interested in Practitioner 1's voice which rises and falls as she talks through a further chest stroke. Mother A gently rolls him onto his back once more; he rolls back to the side to continue observing Practitioner 1. Guided by Practitioner 1, Mother A carries out the 'I Love You' chest strokes, and then bends forward, making her mouth and eyes wide to engage with Baby A.

As an observer, it seemed to me that Mother A was able to express her love through a combination of physical touch, responsive observation, and engagement of deep emotions. She was also able to communicate a deep respect for Baby A; asking for assent to massage, watching for his responses, and positioning him to allow him to observe Practitioner 1. It is important that we acknowledge the power of these early messages; through massage, I believe that Baby A was learning that he was an individual who was loved and respected. From this footage it would also seem that the quality of voices is significant; Baby A appeared particularly drawn to the musical tone of Practitioner 1's voice. Indeed, as explained in Chapter 2 (Section 2.4.3) IDS or motherese is a songlike and affectionate form of speech (Trevarthen, 2015), which can support the carer to gain and sustain the infant's attention (Espanol and Shifres, 2015).

Themes across the footage – researcher and supervisory team

As the researcher, I made the following observations across the films:

Baby A

- The group had a powerful social function (interest in other babies, carers, Practitioner 1 expressed through vocalisations, smiles, rolling and turning to face other babies and adults)
- Finding his voice – expressing dissent (coughing)
- Music and singing appeared to soothe and settle (he was usually physically active)
- Increasing focus on Mother A across the weeks

Mother A

- Careful observation of Baby A's cues and responses: asking for permission to massage, stopping in response to signs of dissent
- Warmth in the interactions: smiling, attempting to make eye and face-to-face contact, reassuring through touch, cuddles and vocalisations

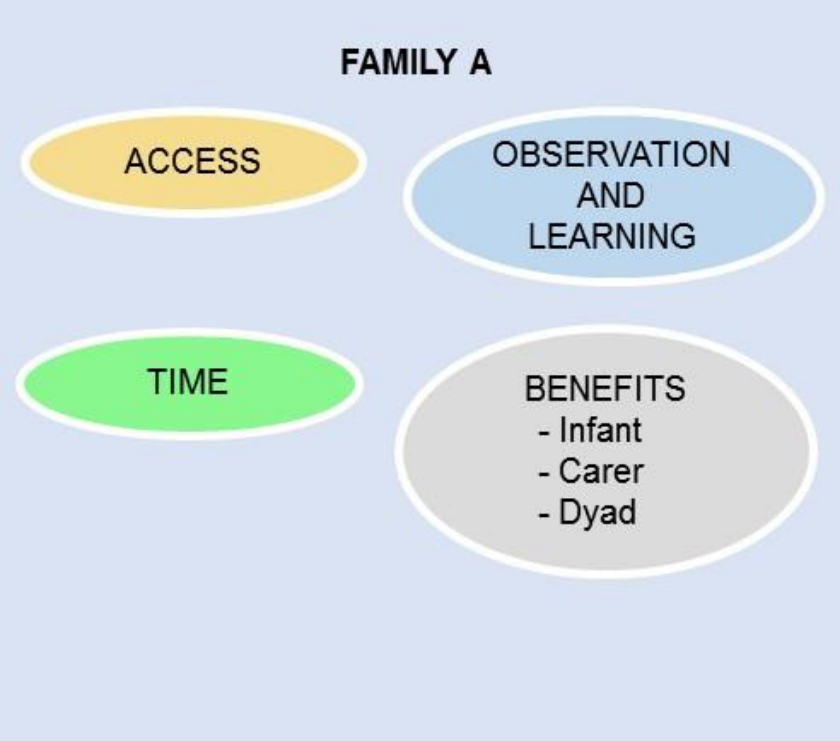
Supervisory team

Barcode: **FA:IMG:VR:2a/5:S1:LR:070316**

Timespan: 01:01 – 05:00 minutes

- Baby A - Clasping hands together, appearing to mirror Mother A's actions with the massage oil
- Dyad - Both lead the interactions, interpreted as indicating a 'good attachment'

Diagram 4 – Family A's themes



Family A's themes

Family A chose to participate in two anticipated follow-up activities, namely co-interpretation of the video footage, and storyboarding and collaging. The themes were drawn from the notes made during the co-interpretation session (FA:CIS:AR:1/1:HV:LR:200516) and the audio recording of the family-led discussion around their photo collage (FA:CA:AR:1/1:HV:LR:070716). Four central and intertwined themes were identified (illustrated in Diagram 4, previous page): 1. Access. 2. Observation and learning. 3. Time. 4. Benefits for the infant, carer, and dyad.

The first theme, access, incorporated Family A's reservations around engaging with infant massage and participating in the study, as well as wider reflections in relation to the accessibility of the programme. Father A expressed concerns that their health visitor referral to the service may reflect a need to resolve *'a problem'*, as well as doubts around the suitability of infant massage. Mother A stated that she had an awareness of infant massage, but was not persuaded of its utility. Furthermore, having moved beyond the challenges at the point of referral, the family were unsure that they would still be suitable to participate in the study. Mother A also spoke of a level of confusion amongst friends in relation to service eligibility; some families had been referred to infant massage, whilst others had not. Father A felt that the referral process constituted a barrier to wider engagement with the service.

Observation and learning was a significant theme in the data. Both parents felt that Mother A had learnt an important *'skill'* through the infant massage group which she

subsequently taught to Father A. Mother A also envisaged continuing to use the techniques as Baby A grew older. Father A described the positive effects of returning home to hear about Mother A and Baby A's shared learning, and to observe Baby A's enjoyment of massage. The family appeared to have a strong interest in Baby A's development, and seemed confident in interpreting his cues. The videos, filmed across a 5 week period, provided opportunities to further pinpoint developmental changes, and to specify the aspects of massage that Baby A enjoyed, those that he did not, and the signals given to communicate this. I also noted the detail in the family's observations, for example, identifying that Baby A's right leg was often kicking, and that this was his *'more dominant leg'*. Father A also suggested that demonstration videos of infant massage would be a useful tool for male carers, encouraging their participation. In my opinion, the family's observations of their child through infant massage supported the recognition of Baby A as an individual with personality traits. Commenting on Baby A's drive to roll over, Father A stated*: "He was so persistent with it as well…he didn't give up until he could do it."* (FA:CA:AR:1/1:HV:LR:070716)

Time was identified by Family A as particularly significant during the first six months after the birth of a child; Father A described this period as *'compartmentalised'*, allocated to new care routines such as nappy changes and feeding. By contrast, Mother A said that the infant massage group provided a dedicated segment of time where the focus was solely on the infant and carer. Being on time was also a challenge as a new parent; Mother A commented that earlier wakes after naps, feeds and last minute nappy changes could significantly affect arrival times at groups and classes. Father A felt that the weekly 90 minute infant massage group

offered needed flexibility to families, incorporating *'allocated time'* to learn massage techniques, as well as time to maintain babies' routines. Reflecting on the timing of the infant massage course in relation to the challenges the family had faced, Mother A asked herself: *"If I had been to massage a month earlier, would I have been able to manage my emotions?"* (FA:CIS:AR:1/1:HV:LR:200516)

The benefits for the infant, carer and dyad were numerous, often overlapping. The family found that Baby A's experience was positive, with health, relaxation, physical and social benefits highlighted. Both parents noted from the video footage that Baby A appeared to be relaxed and enjoying the sessions. They also found that particular massage strokes had supported Baby A's digestion and circulation, and that he could be calmed through singing. Mother and Father A also felt that through massage, Baby A had become more bodily aware, beginning to use his feet to pick up foam blocks. His development also appeared to be linked to a drive engage socially; Mother A had observed that during massage groups he began to try to turn over, stimulated by an interest in the other group participants.

Furthermore, highlighting a photograph in the family's photo collage depicting Baby A doing hip rises, Mother A explained that he would do them *'to people'* when excited. I interpret this as a form of bodily communication. Additionally, Mother A identified sections of footage where Baby A used a *'fake cough'* (a technique also used by Baby C in Section 6.4.3) and where he blew bubbles. Mother A explained that he had seen a friend's baby blowing bubbles, and began to do this the following day. The acquisition of these techniques suggests to me Baby A's drive to

provoke dialogues with others through the *'fake cough'* as well as his great capacity as a learner.

Mother A found that massaging with Baby A was a pleasurable experience overall. In the early weeks of the group, she had experienced some frustration as Baby A seemed interested in the other participants, and less focused on her. Additionally, she had some minor difficulties with some of the strokes, and both parents had found the course hand outs challenging to understand. Father A observed that through participating in the infant massage group, Mother A's confidence and coping skills in relation to parenting and *'handling'* Baby A had increased, and this was attributed to having *'close time'* with him.

The shared benefits of infant massage for the infant-carer dyad included regulation, social interaction, and bonding. Mother A stated that learning to massage had equipped her with a technique to calm Baby A. This may link with Father A's wider observation that Baby A was adjusting to new experiences and sleeping better, whilst Mother A was *'coping better'*, and the increased synchrony could be interpreted as an indicator of a 'positive feedback loop' (Celebi, 2013). Mother and Father A also commented on the social aspect of the infant massage group. Mother A said that she found that she could get *'low'* at home, and that it was important for Baby A to experience new environments. Additionally, Father A felt that the group provided important support for Mother A. During the video co-interpretation session, Mother A talked about earlier fears that she would not be able interact with and 'entertain' Baby A as he became *'more alert'*. Both parents agreed that the bond

between Mother and Baby A had strengthened through the infant massage process. Mother A explained that since learning the technique, and when holding Baby A it was *"…not just holding..."*, she would *"…rub his back or his feet…it's that closeness…*" (FA:CIS:AR:1/1:HV:LR:200516), indicating the potential of massage strokes to deepen interactions. The family said that they had continued to use the techniques in daily life; using the stretches with Baby A after car journeys, and massaging cream into patches of dry skin.

6.4.2 Family B

Family description **(FB:FD:E:1/1:270417)**

Mother B opted to provide written responses to the family description questions through the following piece of writing:

> *I am a 39-year-old single mum to a beautiful little boy who was born in December 2015. He is my only child.*
>
> *My family all live locally to us and my son loves spending time with his cousins, grandparents and auntie and uncle. We have also now made some new friends through groups we attend and often meet with other children of a similar age to my son.*
>
> *My pregnancy was not without problems (some of these caused by my baby's father) and being an older mum, I was quite anxious throughout my pregnancy as I was aware that my age could cause complications. My labour was not straightforward and I was rushed back into hospital 10 days after giving birth as I had a massive haemorrhage, which was extremely*

frightening for me and my family. Thankfully, after an emergency surgical procedure and a short stay in hospital, I was allowed home. I was advised to take things very carefully following my operation and so spent a few days at my Mum's recovering. I spent the following few weeks building my strength up and bonding with my wonderful baby.

My son was 10-and-a-half weeks old when we started the baby massage course and I had never tried it before. At the time we started the course, I was going through an extremely difficult period and experiencing harassment and emotional abuse from my son's father, as well as being at the start of a lengthy court process to protect my son and myself from that man. I saw the massage course as a way of bonding with my son and having some special time together, away from all the external pressure I was under.

I suffer from social anxiety and even attending a group was a major deal for me. My son would not settle at groups initially and I found this very difficult to cope with. I suspect he was picking up on my anxiety and this was contributing to his own uneasiness. One of the reasons I agreed to take part in the research project was to give me more of a reason to commit to the course and keep attending, however difficult the first few weeks were. I didn't feel I could give up as I had committed to being part of a study and I know that had I not been part of it, I probably would not have gone back after the first week when my son spent the whole session screaming!

I strongly believe that the baby massage courses I attended strengthened the growing bond I was developing with my son. The focus was solely on the whole experience of baby massage and exploring the benefits for my son. I

used some of the techniques at home whenever my son became fretful and they quickly calmed him. Massage is a very intimate practice and I definitely felt closer to my son as the course progressed, I was able to read his body language a lot better and quickly learnt what he liked/disliked. I think the benefits of baby massage are too many to detail but I know for myself and my son, it was an extremely positive and relaxing experience during a very challenging time in my life.

Identified vignettes

To maintain the chronological order of the vignettes relating to Family B, and to give the reader an understanding of the developments across time, the vignette episode will be presented first, and the vignette frame second.

6.4.2.1 Vignette episode

This episode recounts the first period of filming with Family B; they had been unable to massage in Week 2 as Baby B had been very distressed (Chapter 5, Section 5.3.3.1). This short and very subtle film recorded in Week 3 documents the family's first experience of shared massage (approximately 104 seconds), and underlines the importance of a more gradual approach to massage for some families.

Barcode: **FB:IMG:VR:1/6:S1:LR:070316**

Timespan: 00:00 – 04:57 minutes

First experience of massage

Infant massage group – Week 3 (Filming Session 2)

Mother B kneels at the end of the massage mat, bending over Baby B, who is lying on his back and is fully dressed. Whilst listening to Practitioner 1's introduction to the strokes, Mother B seems to demonstrate warmth and reassurance, gently tapping Baby B's nose and chest, and nodding her head. Baby B holds Mother B's thumbs, and they maintain a close physical proximity, exchanging smiles and eye contact. There appears to be a strong shared focus through their interaction, which I interpret as 'companionship' (Trevarthen, 2001). The massage begins with Mother B resting her hands on Baby B's stomach to create warmth. Baby B then places his hands over Mother B's hands and appears to follow as she begins a rhythmic stomach stroke using very gentle touch. Moving on to the next stage of massage, Mother B raises Baby B's legs, and he moves his arms. There appear to be two distinct phases in Baby B's focus; for the first half of the massage (approximately 54 seconds) his gaze appears completely focused on Mother B, and in the final 50 seconds, he begins to look to the side and in the direction of the other families, punctuated by brief glances towards Mother B. As the massage ends, Mother B gives Baby B her thumbs to hold, and is invited to share her experiences with Practitioner 1. As Mother B speaks, Baby B continues to alternate his attention between other families and Mother B. Mother B then returns to talking and nodding with Baby B. Baby B puts his head to one side, and Mother B copies this. As the film draws to a close, Mother B leans forward and kisses Baby B's hand.

In my view, this footage suggests that after an unsettling time in the early weeks of the group, Baby B was beginning to adjust to the environment and people in it. Moreover, although other babies could be heard crying in the background during filming, Baby B appeared to be unaffected by this, remaining focused on his interaction with Mother B and observations of other participants. This could also indicate that the combination of gentle touch through massage and close proximity to his primary carer were key to supporting Baby B's self-regulation, and would connect with Jean, Stack and Arnold's (2014) claim that mothers can regulate changes in infant emotion 'through touch alone'.

Indeed, reflecting on the video footage at our co-interpretation session, Mother B commented that up to this point, hearing other babies' cries would usually lead to Baby B becoming tearful. In my view, the video also documented the significance of focused time for the infant and carer to connect, which Mother B highlighted in her family description and themes later in this section. Socially, Baby B appeared to show an emerging interest in others in the group, which could indicate an emerging secure base (Ainsworth, 1982). He also seemed to be mirroring Mother B's hand movements, and at the end of the film, to be initiating an interaction by putting his head to the side. Trevarthen and Malloch (2002) claim that there is 'precision' in the 'mirroring' behaviours of the young infant; smiles, vocalisations, synchronised gestures, and adult imitation are all features of the reciprocal infant-carer interaction.

6.4.2.2 Vignette frame

This 90 second segment of footage was recorded with Family B during the first of two massage sessions (Chapter 5, Section 5.3.4) which followed the infant massage group (Chapter 5, Section 5.3.3) . I believe this footage documents a turning point in both Mother B's confidence and Baby B's readiness to participate in massage, supported skilfully by Practitioner 1.

Barcode: **FB:IM1-2-1:VR:2a/6:S1S:LR:080416**

Timespan: 03:30 – 05:00 minutes

Key BB = Baby B P1 = Practitioner 1

MB = Mother B R = Researcher C = Camera

Table 5 – Family B: vignette

Timespan	Observations	What could this tell us?
03:30 – 05:00 mins	*BB's arms and legs are extended throughout this section of footage, contrasting with a more contained posture in footage recorded at the group session.	Indicator of relaxation
	BB glances towards C, back towards MB.	Exploring from a secure base
	MB – massaging BB's leg – stops to put beads back in his hand.	Observation, possible anxiety – BB's response to dropping beads and capacity for self-regulation
	BB glances towards C (and R?), back towards MB. Looks towards P1 with occasional glances towards MB to the end of the video segment.	Emerging social interest and triangular interaction, returning to secure base
	P1 opens mouth wide, wide eyes "Is that nice? Yeah? Is that nice? It's a bit different isn't it? We're going to sing to you in a minute."	Modelling interaction, Infant Directed Speech
	MB appears to watch BB's responses very carefully as she continues to massage, her posture suggests she may be a little tense	Careful observation
	P1 "Yes we are. Are you smiling?"	P1 as 'regulatory partner' for MB and BB, soothing and encouraging
	MB smiles and appears more relaxed	
	P1 "Right, and then on the foot, do thumb over thumb…lovely spread of your toes…yeah!..." MB smiles, appears to relax.	Stimulation of reflexes Increasing relaxation, developing confidence.
	As MB massages right foot, BB lifts left foot and appears to be introducing it into the massage.	Giving permission for left foot to be massaged
	P1 "…those reflexes on your foot…Yeah! We're going to do 'This Little Piggy' …he's going to go to sleep…he's not going to go 'Wee wee wee wee'…he's going to go to sleep, but not yet…Don't go to sleep yet, BB, you're doing well!"	Modelling respect – speaking to BB as a complex and capable human being, encouragement to both BB and MB
	P1 and MB recite 'This Little Piggy' whilst completing toe massage. BB looks towards P1. P1 opens her mouth wide and smiles "Looking very chilled!" She laughs.	Relaxing effects of massage and rhyme in combination

In this film, Baby B's posture appeared more open and relaxed; he lay on his back with his legs and arms extended, and at one point appeared to offer his foot for massage, suggesting assent and anticipation. He also had a string of beads which he played with intermittently across the full massage session. When they fell from his hand he seemed calm, and Mother B passed them back to him. Furthermore, he appeared to demonstrate an increased engagement with the social environment, looking between the camera, Mother B, Practitioner 1, and the researcher. I interpreted this as an indicator of an emerging secure base (Ainsworth, 1982), from which Baby B was beginning to explore the environment and people in it, and the very beginnings of triangular interaction (Fivaz-Depeursinge, Lavanchy-Scaiola and Favez, 2010).

Mother B appeared very respectful and observant of his responses, later commenting that she had been concerned that without the beads Baby B would become unsettled, and that it would be difficult to calm him. Indeed, I had observed that her posture suggested that she may be feeling nervous, and that Practitioner 1 appeared to be gently supporting and encouraging both Baby B and Mother B. I interpreted this as Practitioner 1 acting as what Gerhardt (2015) describes as the 'regulatory partner' to the dyad; a role that seemed to be offered particularly effectively through individualised massage sessions.

Towards the end of the footage, Practitioner 1 and Mother B recited a rhyme as they completed the toe and foot massage, and Baby B maintained an extended body posture, looking towards Practitioner 1. It appeared that the combination of

music and rhyme had a relaxing effect, which may have supported Baby B's self-regulation. Indeed, footage recorded towards the end of the session suggested that singing and rhymes had a strongly soothing effect when Baby B started to appear unsettled.

Observed themes across the footage – researcher and supervision team

Baby B was 10-and-a-half weeks old as the infant massage group began, and approximately 17 weeks old as we began the individual follow-up sessions. After some initial difficulties settling in the group (Section 5.3.3.1), Baby B and Mother B appeared to relax (Sections 6.4.4.1 and 6.4.4.2). I made the following observations across the films:

Dyad

- Individual sessions with Practitioner 1 – important support at a pivotal time:
  Baby B - body posture more extended, appeared to engage more with the social environment
  Mother B – increased confidence in holding Baby B's emotions

Baby B

- Music and rhymes in combination with massage appeared to have a significant soothing effect when unsettled

Mother B

- Highly observant, respectful of and responsive to cues; introduced a range of gentle touches and playful facial expressions to engage and reassure

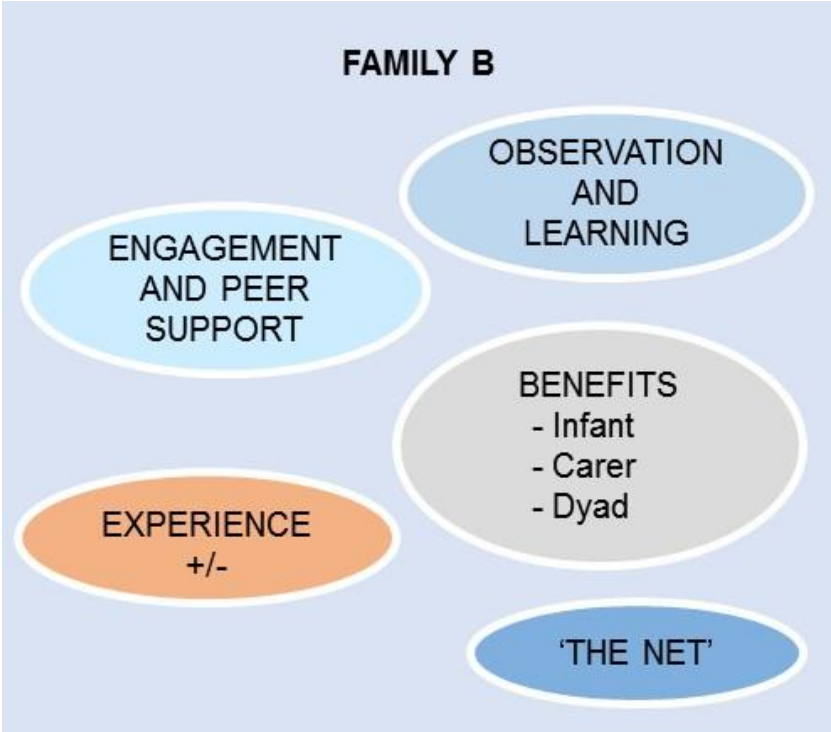
Supervisory team

Barcode: **FB:IM1-2-1:VR:5/6:S1:LR:260416**

Timespan: 00:00 – 05:00 minutes

- Baby B – Appeared secure and physically active; seemed to introduce leg to the massage, suggesting anticipation and assent

Diagram 5 – Family B's themes



Family B's themes

Family B also chose to participate in the two follow-up activities; the themes (Diagram 5) are again drawn from the co-interpretation notes made during the session (FB:CIS:AR:1/1:HV:LR:240516) and the audio recorded and parent-led discussion in relation to the collage developed (FB:CA:AR:1/1:HV:LR:080916). The five main themes emerging from the data were: 1. The infant massage experience; positive, challenging, and with special features. 2. Observation and learning. 3. Benefits for the infant, carer and dyad. 4. Engagement and peer support. 5. 'The net', a miscellaneous category used by Adair *et al.* (2016).

Family B's infant massage experience was built across a longer timeframe than expected; early group sessions had been difficult as Baby B had become distressed, so follow-up one-to-one sessions were arranged. Family B then took part in a second massage group in the early summer. Consequently, the first theme highlights a mix of positive and challenging elements. Mother B's collage documented a positive overall experience; she explained that the images were selected to represent the *'soothing'* nature of infant massage, and the lavender as a metaphor for *'growth'* that was continuing. The bright colour palette was chosen to reflect both a *'happy'* experience, and the character of Baby B. Mother B also stated that she had not anticipated the positive difference that infant massage would make to them both.

Reflecting on the family's experiences in the group, Mother B spoke of a sense of isolation; feeling that the rest of the group was looking at them, and that she was

the *'only one'* experiencing this*: "At first it was impossible…I honestly didn't know what to do with him…I think I was nervous. …I think it was a new experience, new people, new environment. …"* (FB:CIS:AR:1/1:LR:240516). Having spent the majority of the group sessions as an observer, Mother B said that being able to massage in the one-to-one sessions had improved her confidence. She also thought that she and Baby B were more relaxed, and that during the second group course he was significantly *'more responsive'*. In my view, this foregrounds the significance of timing and individualisation of services; the appropriateness of the service in relation to the challenges in families' lives and babies' development, and how we tailor support in response.

In Mother B's opinion, infant massage was a *'powerful'* new shared experience, one that she would not have considered doing independently of the children's centre's recommendation. She also spoke of the domestic workload, which at times could make it difficult to prioritise shared experiences in the home. By contrast, the special feature of infant massage was its clear focus*:"…I think being focused in that group really helps me to kind of bond with him…"* (FB:CA:AR:1/1:HV:LR:070716). Moreover, the massage activity itself provided a further channel through which to connect.

Observation and learning was a strong theme emerging from Family B's data. Mother B stated that she had felt a strong drive to learn something new to share with Baby B. Furthermore, infant massage had supported her to better understand, *'read'* and zoom in on Baby B's cues and body language, and his likes and dislikes.

Through the massage experience, she believed that she had come to *'know him'* a little more. Indeed, co-interpreting their films she commented on his vocal and postural cues, as well pinpointing specific likes, dislikes, and emotional states.

The reported benefits for the baby, carer and dyad were numerous. Mother B thought that massage had helped to alleviate Baby B's colic symptoms, and that he was now significantly more relaxed. Socially, although early group experiences had been difficult, he had become more accustomed to these contexts. Furthermore, the video co-interpretation session offered Mother B the opportunity to observe developments with regard to regulation and awareness and anticipation. Through the films, she identified the first instance of being unaffected by other babies' cries, the calming effects of the massage environment when a favoured toy was dropped, and the soothing nature of singing (FB:CIS:AR:1/1:HV:LR:240516). In a later section of the films, Mother B observed that Baby B appeared to be waiting for something to happen (FB:CIS:AR:1/1:HV:LR:240516).

Mother B felt that across the massage experience, she had become *'closer'* to Baby B, and that her confidence had increased. She spoke of feeling able to continue with massage when Baby B became mildly *'grizzly'*, which I interpreted as an increased confidence in reading and grading his cues, and in her capacity to soothe him. She also reported a more relaxed approach as time went on, of reducing the pressure on herself to *'get things right'*, and focusing instead on important cues: *"…you have to listen to your child and what they want and try and read them."* (FB:CA:AR:1/1:HV:LR:070716) Mother B also spoke of a sense of achievement; as

a family they had persevered with massage despite difficulties in the early weeks. Through the experience, she had realised that touch and relaxation in all their forms were important.

The shared benefits included time, an enhanced sense of attunement, and the ongoing use of massage techniques. Mother B said that having designated time to share massage as an infant-carer unit was positive, and through which a *'special bond'* developed. She was unsure that such synchrony would have been achieved without the course. The family also continued to benefit from incorporating elements of massage and singing into their routines, using the techniques during nappy changes, to settle Baby B when he became upset, and to support the bedtime routine.

The theme of 'engagement and peer support' emerged in response to an important ethical question I put to Mother B, asking if the family's participation in the project had added to the pressures in the early weeks of massage. Mother B was clear that this was not the case, pointing out that being part of the study had been a support, giving them the *'impetus'* to persevere. From this, I asked Mother B for her views on peer support for newly massaging families. She said that the experience of having a distressed baby in sessions could be *'isolating'*, and that connecting with other peer support families at groups or by phone could be positive. Mother B also felt that it was important that a more balanced picture of infant massage was communicated; knowing about the positive and challenging elements of the experience could provide important encouragement to persevere.

‘The net’ (Adair *et al.*, 2016) contained one piece of data; Mother B’s comment that despite not enjoying the group massage sessions herself, she felt strongly that Baby B would benefit, and so continued to go. I interpret this as indicative of Mother B’s determination and persistence, as well as the capacity to prioritise the needs of her child.

6.4.3 Family C

Family description (using FC:FD:RN:1/1:HV:LR:210217).

Family C opted to answer the family description questions through a conversation with the researcher, and with the researcher making a written note of the answers. Family C consisted of Mother C and Baby C; Mother C’s husband and younger child (born after the fieldwork was complete) did not participate in the study. Mother C was married, in her 20s, and described her ethnic origin as East African. Baby C was male, born in August 2015, and was 9 months old at the time the family participated in the individual infant massage sessions. He was the family’s first child, and Mother C and her husband were his main carers. Mother C described her pregnancy as *‘good’*, although for part of it health professionals thought that Baby C may be *‘big’*. Baby C was born one week after the due date, and during the first five days there were some difficulties with breastfeeding; Baby C had difficulty sucking, and was sleepy and hungry. Mother C said that the first two or three days were challenging as Baby C couldn’t sleep.

Mother C disagreed with Site 2 that the family were facing challenges at the time that they participated in the infant massage sessions and study, but felt that these occurred after the birth of her second child. At this point Baby C had a *'good routine'* and was a *'good sleeper'*. Mother C said she had found it tiring as she started work whilst pregnant with her second child, and also talked about her concerns for her new daughter*: "I feel that she's very sensitive – I always worry about her."* Additionally, she described some difficulties adjusting as she was *"…not prepared to be a mum as quick as this. I couldn't accept not having my time."* Mother C said that in the early weeks after the birth of her second child, the East African community *"…came to help, bring food…"*, but that *"…emotionally…our culture – they don't understand it. …"* Having moved to the UK at the age of 16, and going to college to study, Mother C found that people would routinely *"…ask me about my feelings. …"* As an adult, Mother C described herself as *"…very open about my feelings…"*, but felt that her community didn't understand this, and had a general view that *"…being a mum is a good thing…".* However, the children's centre and health visiting teams were able to support her with her feelings around being a parent. Mother C also talked about a different lifestyle in her native country where, after the birth of a baby, new mothers were *"…not alone for 40 days…"* and where children were brought up by the community*. "People always around you – no time to think. People around you to help with your responsibilities."*

<u>Identified vignettes</u>

6.4.3.1 Vignette frame

This 60 second segment of film was recorded with Family C during their first infant massage session, documenting the first moments of the new shared experience. I

believe it presents infant massage as a vehicle through which infant-carer dyads can spend positive and joyous time together.

Barcode: **FC:IM1-2-1:VR:1a/4:S2:LR:150616**

Timespan: 01:01- 02:00 minutes

Key	BC = Baby C	R = Researcher
MC = Mother C	C = Camera	P2 = Practitioner 2

Table 6 – Family C: vignette

Timespan	Observations	What could this tell us?
01:01 – 2:00 mins	MC *"Are you OK, baby? Yeah?"* (Following IMF's demonstration, MC is checking that BC is ready and happy to massage). MC's eyebrows are raised, her eyes wide, and she leans over Baby C as she closely observes him.	Respect / observant of and responsive to BC's states. Engaging and maintaining his attention.
	BC experiences the first sensation of oil on his thighs. BC smiles at MC. MC smiles. BC laughs. MC laughs. They laugh together.	BC is happy to share new experiences with MC – responds positively
	BC touches and holds the outside of MC's hand as she massages his thighs.	Mirroring
	P2 "And how is he? Does he like that?" MC *"Yeah."* P2 "Brilliant. He's very happy to continue." They begin the leg stroke.	Ongoing observation of responses
	BC glances over towards P2, then towards R and C, then back towards MC.	Social awareness / group communication, emerging secondary intersubjectivity, exploration from emerging secure base
	Holding the oil bottle in his hands, BC appears to touch his own knee. His hand becomes oily.	Mirroring, exploration
	BC rolls over to his left side and appears to touch MC's heel.	Mirroring
	BC drops the oil bottle and appears to reach but cannot grasp it. MC then tries to reach it but is also unable.	
	P2 picks up the bottle and passes it to BC. P2 "There you are." BC vocalises as P2 walks away. MC appears to look off into the distance, seemingly relaxed.	Dialogue with others Relaxation linked to rhythmic nature of strokes and conducive environment

It is illuminating to observe a new experience shared by an established dyad; Baby C was around 9 months old at the time he participated in the filmed infant massage sessions. There appeared to be a secure attachment and mutual trust, and thus the pair seemed able to be joyous, playful and relaxed as they shared a new experience. Reflecting on the early group experiences of Family B, this could highlight the importance of supporting families with newer dyadic relationships to feel safe as they begin to share massage, and modelled by Practitioner 1 in the vignette frame in Section 6.4.2.2.

I believe that this footage also foregrounds Baby C's exploratory drive; he appeared to introduce his own hand into the massage and to want to massage Mother C. He seemed to be mirroring Mother C's movements (Trevarthen and Malloch, 2002), putting his hands on and under her hands as she massaged his thighs, as well as reaching for her heel. Moreover, from a secure base he seemed confident to engage alternately with Practitioner 2, the researcher, and the camera, which could indicate group communication skills (Selby and Bradley, 2003) and emerging secondary intersubjectivity, where inanimate objects are introduced into the dialogue (Trevarthen and Hubley, 1978; Trevarthen and Aitken, 2001). Furthermore, Baby C's glances towards the researcher and camera could be interpreted as another feature of secondary intersubjectivity; learning about the world through observing how others engage with objects in it (Gallangher, 2008).

6.4.3.2 Vignette episode

This episode illustrates the potential of infant massage and singing to support infant relaxation. We join Family C at the point where just over 15 minutes of massage and filming have been completed.

Relaxation

Individual massage session – Session 2

Barcode: **FC:IM1-2-1:VR:4a/4:S2:LR:130716**

Timespan: 09:01- 10:50 minutes

Baby C is chewing a toy, lying on his back on a massage mat, and Mother C has positioned her legs either side of it. Baby C's legs are extended; one is resting on Mother C's thigh, and the other against her stomach. Guided by Practitioner 2, Mother C slowly massages the palms and fingers of Baby C's right hand. Mother C then takes Baby C's left arm, retrieves the toy, and gives it back to him to hold in his right hand. The massage of Baby C's left hand begins and Practitioner 2 invites me to join in with 'Round and round the garden'. Baby C appears relaxed; his legs remain extended, and he looks around him as he chews the toy. As I agree to participate, he appears to glance towards me. As a group, we begin to recite the rhyme, and Baby C seems to glance between me and the camera as we do this. The rhyme ends with a gentle tickle under Baby C's arm, and he smiles and looks towards Mother C. They smile and laugh together, and Practitioner 2 asks: *"Is that funny?"* as we laugh as a group. Baby C uses his feet against Mother C's arm to push himself to look at Practitioner 2, then towards me and the camera. We repeat

the rhyme, and he rolls onto his side and tries to move onto his stomach. Mother C gently rolls him onto his back to complete the hand massage, making gentle circles on the back of his hand. He lies very still, glancing towards Practitioner 2 and Mother C, and with his free arm stretched above his head, and foot propped on Mother C's arm, gently flexing his toes.

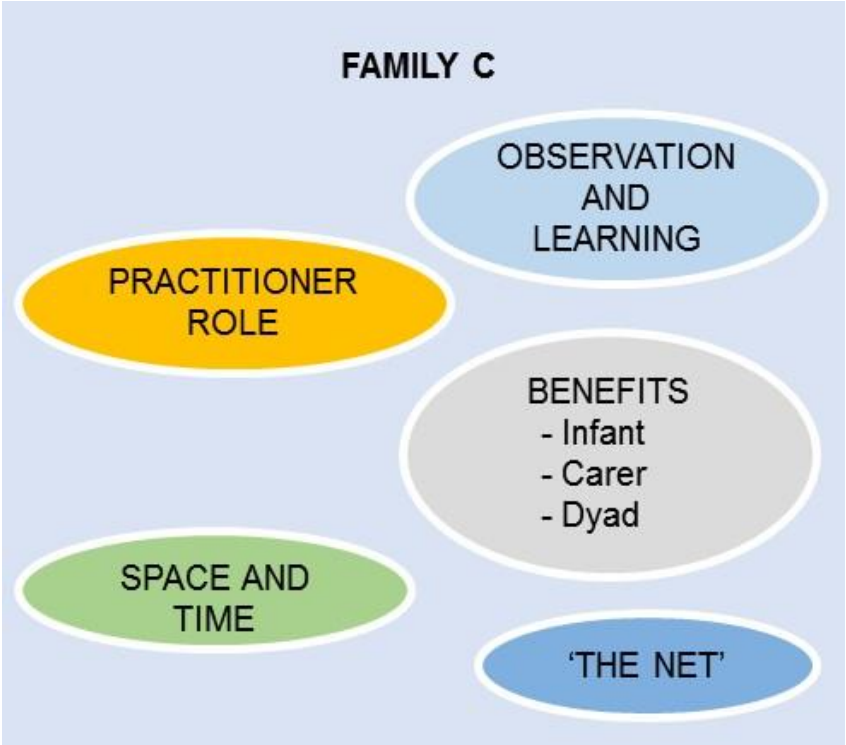
Baby C's extended posture and positioning of his legs touching and draping over Mother C indicated to me that he was both deeply relaxed and had a secure attachment with her. Linking with the previous film, I again saw what appeared to be skills around group communication (Selby and Bradley, 2003) and emerging secondary intersubjectivity (Gallagher, 2008) in his observation of my use of the camera, and efforts to adjust his position to observe Practitioner 2. The film also suggested to me that massage, singing and rhymes in combination are powerful in supporting infant relaxation and regulation. This would appear to support and connect with Shenfield, Trehub and Nakata's (2003) claim that maternal singing has a positive effect on infant arousal, as well as Jean, Stack and Arnold's (2014) clear statement that maternal touch alone can modify infant emotion. This may suggest that infant massage incorporating singing and rhyme is an important regulating medium for dyads with early developing relationships, and when the relationship is disrupted by life challenges.

Observed themes across the footage – researcher and children's centre leader

Whilst it appeared that there was a strong pre-existing attachment between Baby C and Mother C, the sessions seemed to offer the dyad an opportunity to share and

enjoy a new experience, incorporating humour, dialogue, and shared relaxation. The children's centre leader also identified the significance of time together, to experience a sense of 'mindfulness', and distance from daily life. These observations are explored in more detail in the themes which follow.

Diagram 6 – Family C's themes



Family C's themes

Family C opted not to participate in the co-interpretation of the video footage and storyboarding and collaging activities. The central themes (Diagram 6) are therefore drawn from discussions with Mother C as we developed the family description (FC:FD:RN:1/1:HV:LR:210217), researcher observations of the video footage, and co-interpretation of the video footage with the children's centre leader at Site 2 (FC(CL):1/1:S2:LR:210717). I wanted to introduce another form of 'observer triangulation', an activity aligned with 'confirmability', and one of the four criteria leading to trustworthiness (Lincoln and Guba, 1985). As Practitioner 2 was no longer working at the children's centre, the centre leader agreed to co-interpret Family C's video footage. The five themes generated are layered *and* relate back to each other: 1. Observation and learning. 2. Benefits for the infant, carer(s) and dyad. 3. Time. 4. The practitioner role. 5. 'The net' (Adair *et al.*, 2016).

For Mother C, infant massage provided a pedagogic opportunity to observe Baby C, and subsequently her second child, learning about them as individuals, the intricacies of their likes and dislikes, and the benefits of massage. For example, she learnt that her daughter did not like the hand massage element, or being placed on her stomach. Mother C also stated that massage made Baby C *'relax'* and *'happier'*, and her daughter became *'sleepy'*. My observations of the video footage supported this; there was a section of film where Baby C appeared particularly relaxed, with his legs draped over his mother's thighs, and his hands resting near his hips (FC:IM1-2-1:VR:4a/4:S2:LR:130716). Additionally, there were sections of footage where they both appeared physically relaxed; moments of shared relaxation (FC:IM1-2-1:VR:1a/4:S2:LR:150616).

The shared benefits for the dyad indicate to me the intersubjectivity of the experience; Mother C said that infant massage made them *"Closer…"* providing *"…'time for me and him. …".* Moreover, she spoke of her drive to see her children happy; *"…seeing them happy makes me happy. …".* My observations of video footage portraying the first sensations of oil massaged onto skin were that the family were sharing a new and positive experience. Speaking of the benefits for carers, Mother C said that she would recommend infant massage to other families because it had given her *"…the feeling that you're doing something for your baby. …"* Moreover, Mother C commented that her husband also enjoyed massaging, using his own techniques with Baby C, and through that could *"…feel his closeness. …"* (FC:FD:RN:1/1:HV:LR:210217)

I also observed numerous instances of shared dialogue between Baby C and Mother C; they were playful, including laughter, smiles, vocalisations, coughs and raspberries. Mother C said that Baby C would use a *'pretend cough'* to elicit an *'ahh'* response from her. Baby C also seemed to anticipate interactions, waiting for Mother C to pass back the bottle of oil during an early section of footage. During the second and last session of massage and filming, he appeared to interact with Practitioner 2 and myself, and to glance towards the video camera. To me this suggested emerging secondary intersubjectivity, a stage occurring around 9 months of age, where the infant introduces inanimate objects to the intersubjective dialogue; person-person-object (Gallagher, 2008; Trevarthen and Aitken, 2001; Trevarthen and Hubley, 1978). Through the filmed interactions, Mother C

demonstrated a respect for her child, and in a later section of film asked: *"How did you find that…?"* (FC:IM1-2-1:VR:4b/4:S2:LR:130716). I would suggest that this demonstration of respect, offered on a routine basis, would contribute positively to a child's internal working model (Bowlby, 1997) of how their world operates and the people in it function.

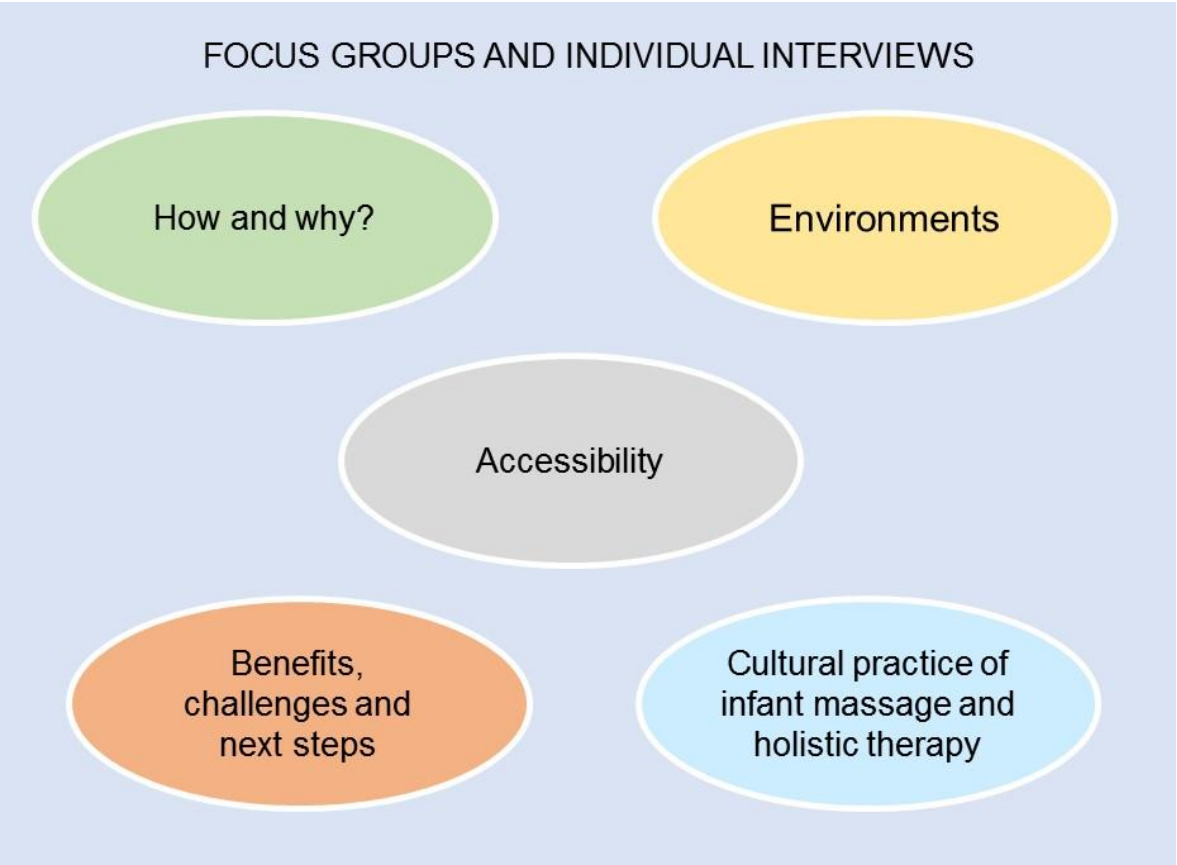
Time was a theme developed from the observations of the video made by the children's centre leader at Site 2, who quickly identified *"…that space, that moment in time to be with her baby…"* (FC(CL):CIS:1/1:S2:LR:310717) as significant. The practitioner saw the importance of both shared time *and* time away from the pressures of life. Observing the apparent relaxation of Mother C at points in the films, the practitioner commented that she may be benefiting from 'headspace'; either with Baby C or reflecting on other things.

The fifth theme identified was 'practitioner role', and was based on my observations of the video footage. Linking with the pedagogic theme and the earlier observations of Practitioner 1, Practitioner 2 appeared to adopt a mentoring role. She supported the parent to observe Baby C's cues, likes and dislikes, and often used the technique of voicing the infant: "Do it more!" The practitioner also modelled a deep respect for Baby C, checking with Mother C which arm he preferred to keep free during massage, telling him that she had noticed and that his wishes would be respected. Throughout the sessions, the practitioner was also able to highlight the potential benefits of different strokes, for example those that may support digestion or the breakdown of mucus. It seemed that the one-to-one sessions in particular

provided the opportunity for supportive and encouraging dialogue bespoke to families' needs; this could be a particular consideration to better meet the needs of some families facing challenging circumstances. Having watched Family C's films, the centre leader's final thoughts were that the leadership team had a tendency to 'underestimate' practitioners' investment in their work.

The miscellaneous 'net' contains a response to a question posed to Mother C during the final home visit, where the content of the family description was discussed. In my view, this is an 'a priori' theme, as it was generated in response to a planned question. Having reflected on Family B's experiences through the initial infant massage group, I asked Mother C if she thought that infant massage groups should be offered over longer periods (groups were usually 4 to 5 weeks long). Mother C said that it would be helpful to have a regular massage session, and spoke about the challenges around getting to groups with two small children when feeling tired.

Diagram 7 – Focus groups and individual interviews: central themes



6.5 Practitioner interviews and focus groups – emergent themes

Five main themes were identified across the audio data from the individual and paired infant massage practitioner interviews and focus groups: 1. Infant massage services – How and why? 2. Environments. 3. Accessibility. 4. Benefits, challenges and next steps. 5. Cultural massage practices and holistic therapy (Diagram 7 on previous page).

6.5.1 Infant massage services – How and why?

<u>How?</u>

This theme focused on the logistics and structure of the infant massage services offered through the participating sites. The broad range approaches to service provision across this small group of centres is summarised in the following table:

Table 7 – Participating sites' infant massage provision

	Site 1	**Site 2**	**Site 2P**
Universal or targeted provision?	Recently transitioned from universal to targeted service	Targeted service	Universal provision
Programme length	7 weeks	4 – 5 weeks	5 weeks (Continuous rolling programme)
Location of service	Rotating around seven children's centres in locality	Children's centre base	Across two centres in reach area
Anticipated age range – babies	3 – 6 months	Around 3 months	3 – 12 months (ideal time 8 weeks – 4 months) Age range extended for children with additional needs
Group composition	Mix of referred families plus invited families from SOAs near identified venue	Referred families	Mix of universal and referred families
Referral process/ sources of referrals	'Simple form' sent to centre for allocation (Health visitors key referrers)	Referral form completed by centre family support workers, allocated at centre review meeting	Most referrals via family support workers' new birth visits, small numbers via health visitors and centre's baby group. Families can self-refer via centre membership form. Practitioner 5 – demonstration of colic strokes at 'taster sessions' during new birth visits, close collaboration with pre-birth practitioner.
Outcome assessments	Mix of outcome measures and end of course summaries to assess effects and support reflective practice. Outcome and participation data shared with referrers.	Parent comments – verbal or written feedback	Pre and post questionnaire, 3 month follow up phone questionnaire. Anecdotes used for termly reports and service development.

Practitioners highlighted the importance of approaching referrals with families in a sensitive manner; Practitioner 4 felt that introducing the potential links to sleep and relief of gas and colic was a supportive route for this. Practitioner 10 (a health visitor) talked about the importance of holistically assessing the family's situation, including evidence of 'positive regard' between infant and carer, handling practices, attunement, tension levels, parental expectations, and additional sources of pressure. Three practitioners saw a need to work with families over an extended timeframe to more effectively assess the longer term impacts of infant massage for families facing challenging circumstances, and this is amongst the recommendations of this project (Chapter 8, Section 8.3).

Why?

Alongside how services were offered, it was also critical to consider *why* they were provided. According to Practitioner 6, infant massage was offered with the aim of supporting families to enhance their parenting skills, and to improve children's life chances. As the first service offered to many families, a number of practitioners felt it had a foundational role, upon and through which other services were 'built' and accessed. Practitioner 13 described it as *"…really early intervention… prevention…building happy babies."* (FG:AR:1/2:S1:LR:010716) and was convinced of the 'evidence' supporting infant massage as an effective 'tool' for families. Indeed, health visitors' early concerns usually led to a referral for infant massage. It was also widely agreed that infant massage was key to encouraging families to access children's centres and to forming strong working attachments with the staff team. The programme also provided opportunities for practitioners to observe

families' massage and interaction experiences, and for the disclosure of issues. The service therefore facilitated a form of triage, and pathways to additional services.

6.5.2 Environments

This theme refers to the key features of the infant massage environment, and the qualities and training of the infant massage facilitator which were integral to this. Encircling them both is the service culture; the practices and values of the wider team at the centres.

The infant massage group

Practitioners felt that creating the 'right environment' was critical; babies and carers needed to feel relaxed and comfortable in order to massage together. The room layout was important, and attention given to the placing of resources (mats, cushions, heuristic play items) and to ensuring the temperature, lighting, music and scents were conducive. Parents were encouraged to participate in breathing exercises to support relaxation before touching their babies, suggesting a link between parent and infant states. A key feature of the environment was that it was baby-led; demonstrating respect and seeking permission from the infant participants. Practitioner 9 thought this communicated an important message to the child; that the carer expected to participate in a lifelong and reciprocal relationship with them. Practitioner 5 said that the concept of asking permission of young babies was surprising for some families. She addressed this through discussion; making links between permission, types of touch and safeguarding. Respecting the baby's cues; massaging only when in the 'quiet alert' state, and remaining observant of

and responsive to signs of dissent or distress were important. Another aspect was the strong focus on massage and connection between the infant and carer, supported by their physical proximity. Practitioners saw this as a multi-sensory interaction, involving skin and eye contact, observation, and an opportunity to spend ‘positive time’ together.

Singing and music were highlighted as important; soft music was used in the background, and different sections of the massage routine were accompanied by specific songs. Practitioners also encouraged carers to share songs associated with their cultural backgrounds. The infant massage environment needed to blend flexibility, inclusivity and structure. Sessions followed a regular and repeated format, gradually introducing massage without overwhelming infants and carers, and encouraging them to follow their usual routines.

Practitioners agreed that the infant massage facilitator needed a personal commitment to the practice, and a special set of aptitudes to guide a complex and changing environment. They needed to respond to babies of varying ages, and to fluctuating group sizes and dynamics. Interacting confidently with a range of people was key; practitioners needed to facilitate group discussions around early parenting, and build trust to enable carers to disclose difficulties. Supporting families without taking over was also critical, particularly as babies could become distressed in sessions. The practitioner was seen as an ‘attachment figure’, and needed to demonstrate important behaviours including warmth, professionalism and consistency. For practitioners working in areas where a range of languages were spoken, the ability to communicate in other languages was also an asset.

Given the complexity and social demands of the role, Practitioner 6 felt that it was important to consider the extent of practitioners' previous experience when making staff training decisions. Indeed, the five massage-trained practitioners who had active roles in children's centre infant massage services had worked with families for between 6 and 9 years. It was generally agreed that infant massage training was a positive and rigorous experience, with significant learning around physiology and anatomy, bonding and attachment, permission and child states, the significance of touch and reciprocal interaction, and non-judgemental practice.

Service culture

The infant massage environment, families and practitioners were located in the context of the service culture and its beliefs and practices. Where infant massage was part of the fabric of the service, senior leaders, partner agencies and the wider staff team were convinced of the benefits. Senior practitioners at Site 1 stated their commitment to the 'early work', claiming that service-wide practice was informed by attachment principles. An ethos of mutual respect and equality amongst the staff team seemed important, and linked to this a commitment to non-judgemental working practices *with* families. Critically, young babies were viewed by the service teams and partner agencies as competent human beings with rights. Practitioner 9 felt that this contradicted historical societal views that children should comply with adult wishes, as well as the beliefs of some professionals that very young children did not have a voice. Health visitors linked to Site 1 spoke of their focus on supporting carers to consider the needs communicated by their child, particularly with parents experiencing low mood. They believed this approach gave 'ownership' to the baby, connecting with the principles of infant massage which is anchored

around gaining the infant's assent and respecting their right to dissent. Practitioner 11 identified an important paradigm shift: *"…if parents recognise that their child is speaking then they're more likely to listen, aren't they?"* (FG:AR:2/2:S1:LR:010716)

Participating practitioners also held strong beliefs about the significance of and connections between touch, attachment and resilience. Touch was viewed as an intimate shared experience between individuals, and an instinctive form of communication pre and post birth. Practitioners were also conscious of the negative effects of insufficient touch. Practitioner 13 spoke of the significance of skin-to-skin contact and research supporting the beneficial effects of infant massage for premature babies, and of breastfeeding as a support for infant-carer proximity. Practitioner 9 highlighted concerns that 'prop feeding' was re-emerging in local nurseries, and believed that this could affect babies' responses to touch and being held, and consequently their relationships with others.

Health visiting colleagues foregrounded their antenatal attachment work with families; supporting mothers to think of their developing babies as unique individuals, as opposed to an inanimate 'lump' that was making them feel unwell. Attachment was seen as connected with learning; Practitioner 9 felt strongly that a secure base enabled the child to learn more effectively, whereas a less secure attachment made it more challenging to participate in communities and wider society. Practitioner 6 linked attachment and resilience; a secure attachment was described as *"…the elastic that helps you bounce back…"* (P6:I:AR:1/1:Cr:LR:040716).

Practitioners felt strongly that alongside meeting the physical needs of the child, there was a critical emotional aspect to the relationship. At home visits and centre activities, practitioners looked for indicators of positive child-carer connections. These included ‘strong’ interaction between the infant and carer such as eye and face-to-face contact, emotional warmth and playful responsiveness to the baby’s cues and interests, touch and cuddling, and use of ‘motherese’. Furthermore, the establishment of breast or bottle feeding routines, and the ease with which the crying baby could be soothed when picked up were features of a developing and positive relationship.

6.5.3 Accessibility

Accessibility was an a priori theme in response to questions posed around barriers to accessing infant massage and engaging for the duration, and how access could be increased. It is subdivided into the barriers experienced by families, challenges for services, and strategies for increasing access. Barriers for families are further grouped as: practical and life routines, personal challenges, and perceptual. The themes are summarised in Tables 8 and 9, which follow:

Table 8 – Barriers faced by families

Practical and life routines

Transport and financial – costly local bus service, rotating massage programme
Long waiting lists
Parental confusion – designated children's centre
Timing of support critical - impacted by centre capacity, waiting lists, rotation of service
Leaving house after first baby difficult, childcare issues – subsequent births
Work commitments
Hearing difficulties
Availability of interpreting services
Financial – service moving from universal to tiered approach
Centre key person system issues – staff unable to offer consistency / be attachment figures

*__Obstacles to engaging and participating for duration__ – immunisations, check-ups, antenatal appointments, infant illness, changing routines in the early weeks after birth, parental tiredness and reduced inclination to leave home

Personal challenges

Health issues
Isolation / rural isolation
Attachment difficulties
Relationship and family issues
Domestic abuse and safeguarding
Financial and housing
Literacy skills
Substance issues
Challenges associated with being a lone or younger parent
Immigration issues / newly arrived in the UK
Mental health and wellbeing – anxiety and confidence particularly common amongst new / first time parents – fears around touch, handling, feeding, infant illness, disparity between expectations of parenthood and reality
Having a child with additional needs

*__Mental health issues and issues impacting mental health__ (e.g. domestic abuse) linked to reduced parental emotional availability, possible negative effects for child, and difficulties engaging consistently with services.

***Some families – faced a number of linked issues:**
Practitioner 11 – Linked high numbers of referrals for low mood with housing and employment.
Practitioner 13 – Over-diagnosis' and medication of infant digestive issues, 'unhappy babies' and mothers with low mood.
Site 2 and Site 2P – Multi-generational households – some parents experienced confidence and bonding issues, and little one-to-one time with children.

Perceptual

Centre viewed as an 'educational institution' / previous educational experiences
'Stigmatisation' - being offered infant massage
Negative experience of first group session
Inappropriate venue
Very small group – experience 'too intense'
Male carers – may feel uncomfortable in female-dominated sessions
Parents instructed by local agencies to join infant massage

Table 9 – Challenges for services and strategies to increase access

Challenges • Funding and staffing limitations – difficult to offer flexible services • Translation requirements in group • Groups facilitated by one practitioner – difficult to support distressed families • Lack of on-site baby clinics / limited collaborative working with local health teams – service duplication and difficulties engaging with families • Referrals (Site 2) – process / paperwork sometimes a barrier for external agencies • Referrals (Site 1) – practitioners did not meet with referred families prior to group – difficult to make critical early link / understand families' needs
Strategies • Offering sessions at varying times of day / different venues / within walking distance • Flexibility in service offer – strong link to access • Offer subsequent courses if unable to join programme • Continuous rolling programme / individual sessions in home (Site 2P) • Invite unconvinced older family members to accompany carers and children to sessions • Creative solutions and inclusive approach – e.g. writing down questions and answers for carer with hearing difficulties, asking carer's partner to translate to Tamil (Practitioner 5) • Support families when the session had not gone well – critical that carer did not 'feel a failure' (Practitioner 1) • Role modelling – male infant massage facilitators (Site 1) • Increasing involvement of local health visitors and midwives – 'first line' of services for families • Centres with co-located health visitor clinics – promote infant massage service alongside • Enhance families' understanding of benefits of massage – an increased focus on easing colic and improved sleep, reducing fears of judgement (Practitioner 6) • Information leaflets – new birth visits • Reminder phone calls to families due to participate in groups

Significantly, practitioners agreed that the vast majority of families were keen to participate in infant massage sessions, and when this was not the case, other forms of support were usually offered. However, we must also acknowledge the array of personal and practical barriers (Table 8) making it difficult to engage with services. Despite funding restrictions, and an increasing shift towards targeting, practitioners seemed determined to work creatively with families to engage and include them. Indeed, Practitioner 13, a health visiting lead, expressed strong views around returning to earlier models of provision: *"It…feels like something that I would love to see universally for all parents…every parent was offered a course of baby massage…making it less stigmatised."* (FG:AR:1/2:S1:LR:010716).

6.5.4 Benefits, challenges and future developments

This theme includes practitioners' observations of the benefits of infant massage, the difficulties that can arise for some families, and possible developments to enhance service provision. The benefits are divided into three interlinked categories; benefits for infants, for carers, and shared benefits:

<u>Benefits for infants</u>

- **Development** – brain development, cortisol reduction, physical development, improved muscle tone, weight gain (premature infants)
- **Health** – reduced colic and constipation, easing symptoms of excema, asthma and colds, improved circulation
- **Sleep and relaxation** – improved relaxation, self-regulation and sleep routines

- **Respect** – Asking infant's permission to massage, and taking direction from cues thought to demonstrate recognition and respect for the child as a capable and communicative human being

Benefits for carers

- **Effects of massaging** with their child relaxing for most carers
- **Enhanced parental confidence**, self-esteem, sense of achievement
- **Pedagogy and observation** – learning a useful new skill, understanding their child more deeply through detailed observation of responses to massage
- **Sharing techniques** with partners and children, supporting wider family bonding
- **Recognising** their child's communicative skills. (Practitioner 4 thought this may be the first time that some parents had viewed their children in this way).

*Practitioner 1 gave an example of a parent who made a new observation of knee alignment issues through massage with her child.

*Babies were observed to show signs of anticipation, an indication of their learning: Practitioner 5 spoke of an infant who began to offer his mother a leg for massage, and of babies looking at carers and each other in anticipation of the song 'Jelly on a Plate'.

Shared benefits

- **Time**
    - Focused and ‘special time together
    - Relaxing and sharing a positive experience, ring-fenced from life pressures, allowing carer to focus on their baby’s needs
    - Massage supporting time at home – establishing routines such as bedtimes

- **Communication**
    - Opportunity to ‘reconnect’
    - Creating a shared focus, facilitating a two-way / multi-modal connection
    - Supports carer to ‘tune in’ to recognise the range of communication (vocalisations, cries, limb positions, body postures, facial expressions)
    - Massage as a channel to express love for child, use of ‘loving touch’ to comfort and support their emotional regulation
    - Supportive tool for parents with depression who may have difficulty expressing themselves (Practitioner 5)

- **Attachment** (explicit link made to infant massage)
    - Touch critical to developing the bond and relationship between infant and carer
    - Involvement of partners and older children encouraged (Site 2P), e.g. a large family who established a family massage

routine and reported increased closeness, calmer household, and improved bedtime routines (Practitioner 5)

- Supported parent where bonding was disrupted after caesarean delivery; through massage, discussion and infant-carer, the bond developed and parental confidence grew (Practitioner 2)

- **Social benefits**
    - Carers – accessing peer support, particularly significant for isolated or referred families
    - Witnessing others' persistence with the programme despite difficulties
    - Group – meaningful opportunities to discuss and normalise parenting experiences
    - Building enduring connections with other families
    - Babies' social interest; vigorous leg movements expressing excitement at seeing other infants, toys, hands and legs purposefully extended towards other babies, learning to turn over and facing neighbouring babies (Practitioner 4)

- **Longer term benefits**
    - Social and emotional aptitudes and language development: adult as 'regulatory partner' (Gerhardt, 2015) – initially supporting baby's emotions through massage, and as they

grow older supporting them to identify words to describe feelings (Practitioner 6)

- Babies who had participated in infant massage session were observed to be exploratory, confident and assertive as older children in children's centre groups (Practitioner 5)
- Breaking down barriers / building communities – bringing together people from different communities, cultures and backgrounds to recognise the shared experiences of parenting

Challenges

Whilst the benefits for the infant, carer and dyad appear extensive, practitioners also recognised the challenges for families who participated in infant massage sessions. Whilst relaxing for some, it was acknowledged that the prospect of joining a group, and managing a developing relationship with a baby could also be a source of anxiety. Massage was viewed as an intimate process; doing so amongst relatively unknown people, particularly if a child had a physical disability or skin condition, could be an exposing experience. Furthermore, persevering with the group with a child who was unsettled or didn't want to massage was a further source of pressure. This could risk compounding negative perceptions of babies as 'difficult', and cause embarrassment and a reluctance to return. Practitioner 6 found that parental tension could impact carers' capacity to read babies' cues, and that parental and child tension were symbiotically linked. This connects with Celebi's (2013) concept of 'positive' and 'negative affect cycles'. However, Practitioner 1 highlighted the critical importance of group discussion in reframing carers' perceptions of the purpose of infant cues such as crying.

Once anxieties around participating in a group had receded, and a 'network' of peers had developed, families were more likely to continue with massage. It was also recognised that for some, the group environment was not suitable; timing of the sessions in relation to the issues faced could be challenging, and individual sessions or another form of support may be more appropriate. Practitioner 11, a colleague who had worked extensively with survivors of sexual abuse, stated that the transition to parenthood could be a difficult time, particularly around touch. Consequently, there were questions around whether or not infant massage was supportive for families with these experiences. She suggested that infant massage groups might adopt a feature of their psychologically-focused services; an invitation to parents to speak with a member of staff should any strong feelings be elicited.

Future developments

Practitioners also thought that there were a number of ways in which infant massage services could be developed:

- Training / awareness-raising with colleagues working with young families (children's centre staff, social workers, GPs, midwives) around the benefits of the service and links between infant massage and academic resilience
- Follow-up work with families – longer term effects of infant massage
- Work with families who did not access the service – improve understanding of needs
- Tracking work – health visitors completing 1 and 2-year-old checks, children's school progress

6.5.5 Cultural massage practices and holistic therapy

Cultural massage practices

The cultural practice of infant massage emerged through the contributions of Practitioners 2, 4, 5 and 7. Practitioner 7 was approached to participate in the study as she had personal experience of the cultural practice of infant massage in India and the UK, and also worked at a hospice as a holistic therapist. Practitioners 2, 4 and 5 participated in the focus group and interview phase, sharing observations of the cultural practice of massage amongst families living in their district. Practitioner 5 also recounted personal experiences of the familial practice of infant massage whilst growing up in Bangladesh.

The following observations about infant massage were shared:

- Widely practised in Asian culture, across the lifespan and passed informally through generations, perhaps without a full appreciation of the benefits associated with structured infant massage programmes
- Traditions – mother and child remained separate from community for a period following birth (Bangladesh 40 days, India 6 weeks) (Practioners 4, 5 and 7)
- Significance of familial support in the early weeks; caring for infant and mother, older siblings, managing household chores and mother's diet (Practitioners 4 and 7)
- Claims that familial support reduced likelihood of depression, and protected delicate dyadic immune systems (Practitioner 7)

- Infant's transition to life outside the womb significant; adjusting to a new world of sounds, touches and stimuli (Practitioner 7)
- Features of traditional massage – many parallels with programmes in children's centres; strokes linked to body parts, stretching exercises in the routine, use of emollient (buffalo cream and turmeric). Careful preparation for massage; timing, baby's states and cues, deep respect, asking for permission (Practitioner 7).
- Massage should be 'musical', following a rhythm. Singing durung massage *"…stimulates them. It connects them to you…this enhances the massage…parent is also quite relaxed when they are singing…"* (P7:I:AR:2/2:HV:LR:180716).
- Benefits: relief of colic and colds, circulation, strengthens muscles, improves skin tone, supports bedtime routine, assists baby to feel 'secure and relaxed', 'special time' with carers, siblings and wider family (Practitioner 7)
- Use with other relatives; relief of mother's arthritis and on a continuing basis with teenage / adult children (Practitioner 5), grandchildren, nieces and nephews (Practitioner 7)

Holistic therapy

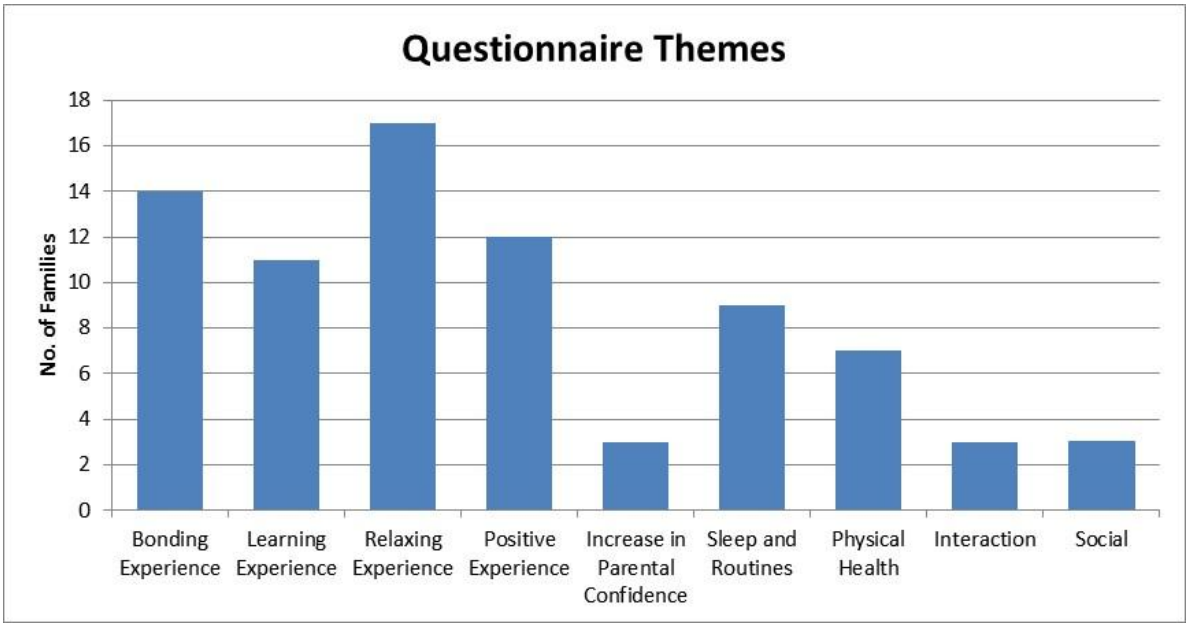
There also appeared to be many links between cultural and programme-based infant massage and the practice of holistic therapy. It would seem that there is a fundamental human need to connect, and to give and receive comfort through touch.

As a trained holistic Practitioner 7 made the following observations:

- Insufficient levels of touch in the lives of patients (critical to offering comfort and alleviating isolation)
- Gentle treatments such as reflexology and reikhi; popular with cancer patients as skin is very sensitive
- Treatments always carried out with consent, respect, and in a patient-led manner
- Reported benefits: improved flexibility, calmness and relaxation, better sleep
- Connection between therapist and patient; therapist role was to ‘give’, listen and talk with patient in a non-judgemental manner

It is my view that the therapist’s role links strongly with the ‘regulatory partner’ concept (Gerhardt, 2015) introduced by Practitioner 6 (Section 6.5.4).

Figure 1


Questionnaire Themes
No. of Families
18
16
14
12
10
8
6
4
2
0
Bonding Experience
Learning Experience
Relaxing Experience
Positive Experience
Increase in Parental Confidence
Sleep and Routines
Physical Health
Interaction
Social

6.6 Questionnaires

The questionnaire phase aimed to address a central criticism of case study and small scale qualitative research; lack of generalizability. Following Lincoln and Guba's (1985) markers of trustworthiness criteria (Chapter 3, Section 3.5), the intention was to conduct a small exploration of the transferability of the experiences of Families A, B and C to a wider group of families facing challenging circumstances. Lincoln and Guba (1985) call this 'fittingness' to other contexts. Eighteen families identified by practitioners at Sites 1, 2, 2P and a further partner children's centre (Site 2P2) participated in this phase. In response to the five questions posed (Appendix 7), four central themes and five sub-themes were identified (Figure 1, previous page):

Central themes

- **Calming and relaxation** – Seventeen families found infant massage calming or relaxing in terms of environment, overall experience or effect on the family. Relaxation for babies was highlighted strongly.

- **Bonding** – Fourteen families believed that infant massage facilitated the development of a strong connection between the infant and carer.

- **Positive experience** – Twelve families described their infant massage experience using positive terms such as 'fun', enjoyable' and 'lovely'.

- **Learning** – Eleven families highlighted this theme which included gaining new skills and appreciation of the techniques, learning about their infant, and sharing knowledge with others (the child's siblings and other carers). Sharing techniques with the wider family also enhanced sibling and familial bonds.

Sub-themes

- **Sleep and routines** – Nine families stated that infant massage had supported sleep and daily routines, including improved bedtimes and better sleep after massage.
- **Physical health** – Seven families said that infant massage had been positive for infants' physical health, supporting wind, colic and digestion, and easing flu and cold symptoms.
- **Parental confidence** – Three participants felt that learning massage techniques had enhanced their confidence as carers.
- **Interaction** – Three participants stated that massage had supported interaction with their child; two found it facilitated a multi-modal interaction.
- **Social benefits** – Three families found that the group was supportive; one carer said the group was 'welcoming', and two carers enjoyed connecting and talking with other parents.

Infant massage – the challenges

When asked to consider the challenging elements of the infant massage experience, ten of the eighteen families said they had not experienced any difficulties, and one family did not respond. Seven families highlighted individual

challenges which focused on learning the strokes, infant routines and preferences, and anxiety around group sessions.

Across the data, it appears that infant massage plays an important role in families' early bonding experiences, and in supporting parents to develop new skills which assist observation and learning about their child. Furthermore, sharing positive new experiences in a conducive environment may lead to an increased sense of relaxation for families, and in turn enhance early infant-carer learning and attachment. Surprisingly, the soothing effects of music and singing during massage were not mentioned specifically, although it is possible that participating families viewed this as part of the relaxing environment. The social aspect of infant massage is complex and is explored further in Chapter 7; a small number of families said that they gained peer support through the groups, although some highlighted anxieties around connecting with and learning new techniques with people who were initially unfamiliar. Appendices 36 and 37 offer further detail on the questionnaire phase.

6.7 Themes across the data

Having identified the themes relating to the individual families (Families A, B and C), the individual and group interviews with practitioners, and the families who participated in the questionnaires, I then looked across the data, grouping related sub-themes to identify the overarching themes, summarised in Table 10 which follows.

There were six interconnected key themes: 1. Observation and learning. 2. Connections. 3. Regulation. 4. Physical health and development. 5. Experience. 6. Access. These were mediated by two further themes: 7. Time and 8. Environment. Lastly, a ninth theme, ‘Concepts and theoretical frameworks’ was identified. This contained the main concepts identified by families and practitioners to explain aspects of the infant massage experience. They will be further explored in Chapter 7 where a conceptualisation of infant massage is presented, binding the themes together.

Table 10 – The key themes

Theme	**Sub-themes**
Regulation	Sleep and routines, relaxation of child and carer
Observation and learning	Learning new skills, parental observation and learning about child's cues
Connections	Communication and interaction, bonding and attachment, social benefits
Physical health and development	Alleviation of colic / digestive issues, circulation, physical development
Experience	Positive experience, parental confidence, self-esteem and agency
Access	Personal challenges affecting access, anxieties around participating in groups, negative experiences of groups, practical barriers
Time	Time together (dyad), dedicated / focused time, timing of sessions in relation to family routines and issues faced
Environment	The infant massage environment and service culture
Concepts and theoretical frameworks	Multi-modal nature of interaction through infant massage, 'circles…containing' (Bion, 1962; Bronfenbrenner, 1979), 'regulatory partner' (Gerhardt, 2015)

6.8 Summary and critical reflections

Chapter 6 has taken the reader through the decisions and processes associated with the coding and analysis of data generated through the fieldwork stage with Families A, B and C, early years practitioners, and families who participated in the questionnaire phase. Detailed case studies and central themes emerging from the data connected to the three groups of participants were then developed. Lastly, looking across the data, six main themes, two mediating themes, and one theme relating to participants' conceptualisation of the experience were identified. Amongst the key aims of this chapter has been to provide a clear audit trail documenting the coding, analysis and interpretation of the data, an aspect of dependability, and a feature of trustworthiness (Lincoln and Guba, 1985). Next, Chapter 7 will interpret the findings in this chapter, connect them to research and theory, and develop a conceptualisation of the function of infant massage.

Chapter 7 – Discussion and findings: The main themes

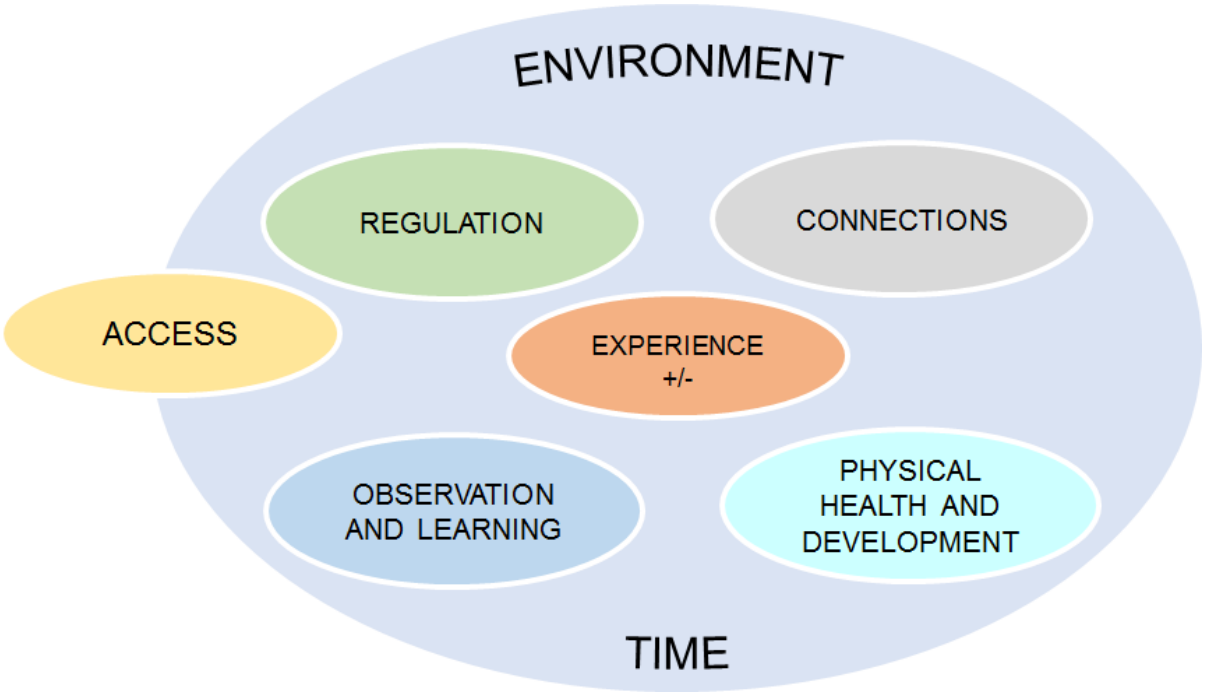
7.1 Introduction

Moving on from Chapter 6 where the themes in and across the data sources were identified, this chapter will interpret the findings and connect them to theoretical frameworks. First, the overarching themes will be articulated and analysed. Second, the project research questions will be revisited, the findings considered, and connections made to the literature. Third, a conceptualisation of infant massage as a facilitator of 'visceral interaction' and its interplay with the surrounding environments (Bronfenbrenner, 1979) will be defined (Section 7.3.1). Fourth and fifth, the strengths and limitations of the study will be considered, and the original contributions to knowledge presented.

7.2 Themes across the data – discussion and analysis

The final stage of data analysis was to look across the data and themes identified through: 1. Video, storyboarding, and co-interpretation work with Families A, B and C. 2. Interviews and focus groups with practitioners. 3. The questionnaires completed by families across Sites 1, 2, 2P and 2P2. This process identified nine themes in total. Six interconnected themes were mediated by two further themes (Diagram 8). The ninth theme was a grouping of the conceptual frameworks identified by families and practitioners to explain aspects of the experience. These frameworks were incorporated into the conceptualisation of infant massage presented in Section 7.3.1.

Diagram 8 – The key themes



The six interconnected themes were ‘Regulation’, ‘Observation and learning’, ‘Connections’, Physical health and development’, ‘Experience’, and ‘Access’. They were mediated by ‘Time’ and ‘Environment’.

1. Regulation

The first theme, regulation, includes the widely reported benefits for infant relaxation, sleep and routines across the participant families and practitioners. Furthermore, a number of the participant families found that massage was also a relaxing experience for the carer, and this was seen particularly clearly in the vignettes for Family C (Chapter 6, Sections 6.4.3.1 and 6.4.3.2). In my view, the state of relaxation of the infant and carer then influences their capacity for observation and learning, making connections, reaping the health and development benefits, and participating in a positive group experience (themes two to six). Celebi (2013) named these dyadic states the ‘positive’ or ‘negative feedback loop’.

2. Observation and learning

The second theme, observation and learning, related to comments made by families and practitioners that infant massage offered focused opportunities to observe the details of their babies’ postural, gestural, vocal and facial cues, and to be responsive to these. Careful parental observation of and sensitivity to infant cues was noticeable across the films recorded with Families A, B and C, such as the vignette episode describing Family B’s first experience of massage (Chapter 6, Section 6.4.2.1). A small number of families noted that their infants appeared to anticipate massage times and to recognise the materials used, indicating infant learning; this was also highlighted by Mother B in the co-interpretation of video

session (Chapter 5, Section 5.3.6). Families and practitioners also foregrounded the significance of learning new practical skills, and a number of families gave examples of how techniques had been incorporated into their daily and ongoing routines. Although families participating in the study did not specifically mention the concept of respect, a theme identified by practitioners, they recognised their children as powerful communicators who made use of a sophisticated multi-modal system of interaction. This communicative adeptness was particularly noticeable in Family A's vignette frame, where Baby A appeared to engage with Practitioner 1, and other infants and carers (Chapter 6, Section 6.4.1.1). In my view, acknowledging their children as capable communicators was indicative of parents' deep respect for them as individuals with rights and unique personalities, and perhaps the most important overarching outcome of the programme.

3. Connections

Connections related to three important elements identified by families and practitioners; bonding, interaction and social connectivity. The positive influence of infant massage on the infant-carer bond or developing attachment was strongly highlighted across the families who engaged with the study. Participating families claimed that the techniques had enhanced their bond, and Families A, B and C all stated that they felt 'closer' to their children. Some families also spoke of teaching the techniques to partners and the infant's siblings, which had positively impacted intra-familial attachments. Indeed, Mother A stated that learning the techniques had fundamentally deepened the way she touched Baby A, claiming that when she held him it was no longer 'just holding', and now incorporated rubbing his back or feet (Chapter 6, Section 6.4.1).

Infant massage as a facilitator of a 'new' form of interaction was foregrounded by two families who participated in the questionnaire phase as well as Families A and B. Using infant massage techniques provided opportunities for a complex multi-modal interaction, a form of engagement used instinctively by the young infants. Indeed, Mother A spoke of Baby A's use of hip rises which were directed at other people and used to communicate excitement (Chapter 6, Section 6.4.1). Father A also highlighted Baby A's fondness for placing his feet round Father A's chin or ears, and thumbs in eye sockets during changing, suggesting to me a deep bodily interaction. Mother B stated that through massage with Baby B there was a *"…physical interaction, and also…kind of reading his facial expressions or just getting to understand him…"* (FB:CA:AR:1/1:HV:LR:080916). Practitioner 12 thought that infant massage gave families the opportunity to *"…communicate at a level which you might not realise was there…"* (FG:AR:1/2:S1:LR:010716). I would suggest that infant massage supports adults to re-engage with a sophisticated form of interaction used by young infants; an inversion of the assumption that communication begins with the acquisition of speech.

Social connections provided by the group was the third aspect of the connections theme, and related to the accounts of practitioners and a small group of families that the group context provided peer support through emerging friendships, and discussions around shared experiences. Family A in particular found that the group context was a positive social environment for both Mother A and Baby A. Significantly, Baby A appeared to have a strong drive to interact with other babies and adults in the group (Chapter 5, Section 5.3.3.2 – vignette episode), and this, in

Mother A's view, encouraged aspects of Baby A's physical development, such as rolling over (Chapter 6, Section 6.4.1.2 – vignette episode).

4. Physical health and development

The fourth theme related to aspects of child health and development. Health benefits were widely reported by families and practitioners, particularly the easing of wind, indigestion and colic. A small number of families mentioned the alleviation of flu and cold symptoms and one family stated that the techniques relieved skin blotchiness related to circulation. Family A felt that infant massage had supported Baby A to become more aware of his bodily extremities, beginning to pick up foam blocks with his feet. White (2014) claims that children need bodily experiences to develop an understanding of the locations of their limbs and 'edges'. Bodily experiences build the nerve sensors in the body and connect them to the brain, allowing us to feel all aspects of the body's movement, and to physically function with confidence. White (2014) states that children with this high level of physical integration (also known as 'proprioception') have an established sense of self, manage well in routine activities, and thus encounter the world with confidence. It would seem that for some babies, infant massage may contribute physical experiences that lay the foundations for physical and worldly assuredness.

5. and 6. Experience and Access

The fifth and sixth themes were strongly connected. Theme five related to the experience of infant massage, which for the majority of families was a positive

shared time with their infants and illustrated in the vignette frame documenting Family C's joyous first experience of shared massage (Chapter 6, Section 6.4.3.1). A number of participants also spoke of enhanced confidence through the programme. Indeed, Mother C stated that it felt good to know that she was doing something positive for her child, and Mother B spoke of a sense of achievement through the programme. However, for some families, it was acknowledged that there could be access difficulties presented by the life challenges they were experiencing, perceptions and fears around participating in a group, and negative experiences of the group massage environment. Family B's vignette episode (Chapter 5, Section 5.3.3.1) describes a difficult early group experience that some may encounter. Access is explored in further detail in the sub-questions in Section 7.3.

The mediating themes

7. Time

Time was a recurring theme identified predominantly by Families A, B and C, and by practitioners in the focus groups and individual interviews. In this study it had a number of different meanings. The infant massage group was viewed as providing important time together for the infant and carer where the main focus was dyadic interaction. It also offered time and space away from other responsibilities and personal issues. The timing of the programme in relation to the life challenges experienced by participating families was also an important aspect of this theme. For Family A, the group sessions began as their challenges had subsided. However, for Family B, the first set of sessions started as they faced a number of

difficulties, and the early weeks of the programme were difficult. Time also related to the timing of the programme session in relation to feeds and sleeping routines; practitioners encouraged families to follow and work around their babies' routines in groups.

8. Environment

The second of the mediating themes was the infant massage environment, which was identified almost exclusively by the practitioners, particularly those who were infant massage trained. This relates to the group environment which supports both the individual infant-carer dyads as well as the group as a unit, and sits inside a further environment; the wider children's centre culture. The environments and their features were explored in detail in Chapter 6, Section 6.5.2 and connect with Bronfenbrenner's (1979) 'ecology of human development' concept later in this chapter (Section 7.3). Furthermore, the infant massage environment is viewed on a continuum of its 'containing' (Bion, 1962) or 'regulatory' (Gerhardt, 2015) capacity. Indeed, the significance of feeling securely held by the environment and the critical role of the infant massage practitioner are highlighted in my observations of individualised massage sessions with Family B (Chapter 5, Section 5.3.1), and in their vignette frame commentary (Chapter 6, Section 6.4.2.2.).

9. Concepts and theoretical frameworks

The final theme related to the concepts and frameworks identified by families and practitioners through the fieldwork. This study aimed to work collaboratively with participants, and co-interpretation and theorising were key aspects of this. The

three main concepts identified were the multi-modal nature of the interaction through infant massage, the regulatory partner (Gerhardt, 2015), and what I interpreted as a fusion of Bronfenbrenner's (1979) nested environments with Bion's (1962) concept of containment. The frameworks are explored in more detail in Section 7.3.1.

7.3 The research questions: Did we answer them?

The main research question and seven sub-questions were important factors influencing the methods selected to get close to the data (Chapter 3), and the source for questions posed to participants through the fieldwork phase (Chapter 5). The sub-questions underpinned the central research question, and this section will address each of the supporting questions before returning to the title: '*How infant massage enhances pedagogical attachment in families facing challenging circumstances*'**.** At this point, my conceptualisation of the role of infant massage will be presented.

Sub-questions

1. **What is infant massage and what are its key features and qualities?**

Massage is an ancient practice, and comprehensive accounts of the techniques have been located in Chinese medical documents dating back to 2760 BC (DeDominico and Wood, 1997). Infant massage is an important component of childcare in many parts of the world, most notably Africa and Asia (Field, 1994) and involves the methodical stimulation of the body with the hands (Bennett, Underdown and Barlow, 2013). It was introduced to western countries by

practitioners including Amelia Auckett and Vimala McClure where Indian and Swedish massage techniques were combined to form the basis of the programmes used today (Underdown and Shai, 2014).

Infant massage practitioners felt strongly that creating the 'right environment' was critical, supporting families to relax and massage together. At Site 1, particular care was taken to create an inviting layout of toys, resources, blankets and cushions. Calming music also played in the background, scents were released from an oil diffuser, and room temperature and lighting were monitored and controlled. This considered approach to the massage environment is recommended in the practitioner guides used at Sites 1 (McClure and the IAIM Circle of Trainers, 2005) and 2 (Cranfield, 2011) and reflects a focus on the multi-sensory effects of the environment.

The importance of singing and music was highlighted by practitioners across the focus groups and individual interviews. Practitioner 7, who practiced infant massage as part of her cultural tradition, claimed that singing during massage had a number of benefits; linking the infant and carer, enriching the massage, and relaxing the carer. Indeed, Underdown and Barlow (2011) listed singing as one of the aspects affecting the 'effectiveness' of infant massage programmes, offering both fun and 'containment'; a concept where strong emotions are taken in and returned to the originator in a more manageable form (Bion, 1962) . In one example, Underdown and Barlow (2011) saw that the facilitator contained the whole group through song. This was then modified by one of the parents who used quiet singing to contain her

distressed infant and gain their attention. Indeed, the video footage with Families A, B and C suggested that singing had a soothing effect for the infants; their limbs and posture appeared very relaxed, and movements slowed and stopped. Family C's vignette frame and episode (Chapter 6, Sections 6.4.3.1. and 6.4.3.2) appear to illustrate the relaxing effects for both infant *and* carer. Family B's vignette frame (Chapter 6, Section 6.4.2.2) documents Baby B's improved relaxation during the individualised massage sessions, and the soothing effects of massage and rhyme in combination. Furthermore, Mothers A and B both said that they had incorporated singing into their usual routines to calm their infants.

A central feature of infant massage was that it was baby-led; permission to massage was sought by the carer only when the infant was judged to be in the 'quiet alert' state. Cues expressing assent and dissent were carefully observed, and a deep respect for the child as a capable individual with rights promoted. However, concerns have been raised that approaches such as the Peter Walker syllabus, where there is a greater focus on flexibility and physical development, may position infants as 'passive recipients' of massage (Underdown, Norwood and Barlow, 2013). This could give cause for concern; in my opinion massage where infants receive strong messages that they are individuals with rights that are respected is likely to support the development of a secure attachment. Furthermore, giving children an early expectation of agency relating to who touches them could be critical to safeguarding. Practitioners and families viewed the infant-carer interaction through massage as multi-sensory, involving skin and eye contact, careful observation, and important opportunities for the infant and carer to share 'positive time'. Two families who participated in the questionnaire phase said that

massage gave them a new mode of infant-carer interaction, and Families A and B both spoke of the multi-modal nature of these exchanges.

In my opinion, the role of the infant massage facilitator was pivotal; they were responsible for creating an inviting physical environment, and for supporting a range of families to feel welcomed, relaxed, and safe in the session. This was clearly demonstrated by Practitioner 1 in the vignette frame with Family B (Chapter 6, Section 6.4.2.2). Practitioners were clear that effective facilitators needed to be confident and experienced, and have a personal commitment to infant massage and inclusive practice. Furthermore, they needed to work flexibly; responding to within session and week-to-week changes in dynamics whilst also maintaining structure. It was also important that the facilitator could lead important group discussions around early parenting experiences, and support distressed families without taking over. Practitioners also spoke of their training experiences which were broadly agreed to be rigorous, incorporating teaching around physiology, anatomy, attachment and child states, and encouraging inclusivity, respect and non-judgemental practice.

2. **How and why is infant massage offered as a service to young children and their families?**

The infant massage service offered varied greatly across the participating centres (Sites 1, 2 and 2P), from a universal service offered to all families in the reach area at Site 2P to targeted services at Sites 1 and 2. Within this, services ranged from

single site and referrals only (Site 2) to multi-site and a mix of referrals and targeted invitations (Site 1). Partner agency involvement in the referral process also varied widely, from health visiting colleagues as key referrers at Site 1, to very limited partner agency involvement at Sites 2 and 2P. Effects were also assessed in a variety of ways; from anecdotal accounts to more structured questionnaires and outcome assessments. The overarching aims of the service as stated by practitioners either previously or currently involved in the provision were around advancing parenting skills and enhancing children's life chances. Many practitioners thought infant massage was a vital early service for families. Usually the first service offered, it encouraged families to access other programmes, encouraged strong professional attachments with infant massage facilitators, and provided important opportunities to identify and support any early difficulties.

3. What are the benefits that are claimed for infant massage, particularly for children and carers who are facing challenging circumstances?

Families who participated in the study through video, collage and co-interpretation (Families A, B and C) and the eighteen families who participated in the questionnaire phase, had recently, or were at the time facing challenges in addition to new parenthood. Families reported benefits including improved infant sleep and routines, increased relaxation for both members of the dyad, and improved parental confidence. Carers found that massage offered opportunities to share a positive experience, to develop new skills, and to observe and learn about their child's cues and responses. A small number of families saw that their children were able to anticipate massage, which I interpret as indicative of infant learning. Carers also

reported that massage provided opportunities to interact and communicate together, and that the bond and sense of closeness had been enhanced. Moreover, families stated that there were physical health and development benefits, with the techniques alleviating the symptoms of colic, indigestion and colds. Family A reported enhanced bodily awareness, and connected their child's social drive to developmental gains. Furthermore, for some families, the social aspect of meeting and discussing parenting with peers was an important benefit.

These findings concurred with practitioner claims around the benefits and much of the literature suggesting that massage has a positive effect on infant and maternal sleep (Field *et al.*, 2016), gastrointestinal functioning (Choi *et al.*, 2016), and both infant (Rangey and Sheth, 2014) and maternal stress (Lai *et al.*, 2016). Furthermore, the practice of massage has been associated with supporting the developing dyadic relationship and positive infant-carer engagement, improved parent confidence, and involvement and support from partners and family (Vicente, Verissimo and Diniz, 2017). Infant massage has also been highlighted as a technique which provides important opportunities for the carer to observe their child (Celebi, 2013), and to recognise their drive to communicate and skills in initiating and terminating interactions (Underdown and Barlow, 2012). This social drive was seen strongly in the films featuring Baby A (Chapter 6, Sections 6.4.4.1).

Indeed, touch as a significant component of massage has been connected with infant regulation (Reynolds *et al.*, 2013; Jean, Stack and Arnold, 2014), is the earliest means of social communication (Montagu, 1986; Botero, 2016), and is

thought to support joint attention (Paradis and Koester, 2015), learning (Addabbo *et al.*, 2015) and language acquisition (Seidl *et al.*, 2015; Abu-Zhaya, Seidl and Cristia, 2017). This could connect with the vignette frame with Family B where Baby B remained settled despite dropping a string of beads (Chapter 6, Section 6.4.4.2). Touch in the NICU has been linked to better development and fluidity of motor skills (Reynolds *et al.*, 2013), which may in part explain Family A's comments about their child's physical development. Whilst families did not specifically mention the neurodevelopmental benefits associated with massage (Alvarez *et al.*, 2017), I observed the group sessions to be highly stimulating for infants, providing a multi-sensory and social experience, and regularly eliciting high levels of infant vocalisation.

4. **What are the causes of difficulties in forming healthy child-carer attachments?**

Practitioners identified a wide range of challenges faced by local families in addition to adjusting to parenthood which included health, isolation, relationship and family issues, domestic abuse, financial and housing issues, literacy difficulties, substance issues, immigration problems, and difficulties linked to being a single or younger parent. Having a child with additional needs was thought to lead to a unique set of challenges for families, and for families with particular cultural and religious beliefs, this could particularly affect bonding. For some families living in multi-generational households where the wider family was involved in care of the infant, one-to-one time could be scarce, and could lead to confidence and bonding difficulties. Whilst the challenges faced by families were broad, and for some there were multiple

difficulties, the key feature appeared to be the effects of the challenges on parental emotional availability. Indeed, parental mental health and wellbeing was a key theme highlighted by practitioners. First time parents were reported to have particular issues with confidence, anxiety around touch, feeding and infant health. Postnatal depression, anxiety and experience of domestic abuse were linked in particular to parental emotional availability.

The literature around attachment appears to support many of the claims made by the practitioners; Orit-Taubman and Spielman (2014) spoke of a 'sense of crisis' experienced by parents of both premature and full-term infants as they adjusted to new responsibilities. Furthermore, attachment issues were identified amongst families of premature infants in NICUs (Pennestri *et al.*, 2015), mothers with heightened depression during pregnancy (Rubertsson *et al.*, 2015), families who had experienced perinatal loss (O'Leary and Thorwick, 2008) and asylum seeking and refugee families (van Ee *et al.*, 2016). Moreover, Olza-Fernandez *et al.*, (2014) highlighted early findings linking disruptions around birth such as Caesarean section, prematurity and NICU admission with negative impacts on dyadic neural and hormonal mechanisms, and possible attachment, learning and mental health issues for children. Falco *et al.*, (2014) made a positive relationship between emotional availability and socio-economic status and maternal age. Taken together, these studies appear to corroborate participating practitioners' observations that challenging conditions experienced by families, and their effects on parent wellbeing have the potential to disrupt the dyadic attachment process.

5. What are the barriers to engaging with infant massage provision?

Practitioners identified a range of barriers to participating in infant massage services which were divided into three main types; practical and life routines, personal challenges, and perceptual. Practical barriers were linked to the logistics of infant massage provision and included transport and financial barriers, waiting lists, lack of interpreting services, rotating programmes, and timing in relation to the challenges faced. Life routines included immunisations and appointments, illness, changing routines and parental tiredness. The personal challenges faced by families were explored in Question 4 above; alongside the potential influence on the infant-carer attachment, personal challenges could also affect the family's capacity to attach with the infant massage services.

Perceptual barriers related to families' expectations of the programme, and could be connected to previous learning experiences, male fears around coping in a female-dominated environment, stigmatisation around the referral, or resistance to feeling instructed by an agency to join a massage programme. For other families, fear of exposing an infant with a serious skin condition or with a physical disability to a group of unknown people could be a barrier. Father A commented that he had found the referral process personally challenging, inferring from this that a 'problem' had been identified which required resolution.

The challenges around participating in a group were foregrounded by families and practitioners alike. Mother B described the early weeks of managing in group sessions with a distressed baby as 'isolating'; this is described in the vignette

episode (Chapter 5, Section 5.3.3.1) and in Mother B's reflections during the video co-interpretation session (Chapter 5, Section 5.3.6). Indeed, amongst the eighteen families who participated in the questionnaire phase, two families highlighted the pressures of participating in a group, and a further two spoke of the challenges of managing around their child's routines and preferences. Practitioners acknowledged that groups could be a source of pressure for some families, particularly with an unsettled child. There were also risks that a difficult massage experience could reinforce negative perceptions of infant behaviours, and that parental tension could affect the ability to read infant cues. The challenging issue of touch for survivors of child sexual abuse was also raised, and it was acknowledged that for families where there were specific needs, a group massage environment was not always suitable.

6. **Can infant massage, offered in a timely fashion, have a positive impact on attachment and communication between the infant and carer, with a particular focus on families facing challenge or under stress?**

There was almost universal agreement amongst participating families that infant massage supported infant-carer attachment. Families A and B and fourteen out of the eighteen families who took part in the questionnaire phase specified that the practice had supported the process, using terms such as 'bond', closer' and 'connection'. Mother C, who participated in the study when Baby C was 9 months old, and the attachment process likely to be more advanced, said that massage had supported them to be 'closer'. Three families made particular reference to interaction; one highlighted the 'unbroken' nature in the massage context, and two

found that massage provided ‘another’ or ‘new’ way to interact. Mother B pinpointed the clear focus on dyadic interaction in the massage group as instrumental in the bonding process.

It would seem that most families who participated in this study agreed with practitioner views that infant massage was a programme through which early attachment relationships were enhanced. However, two of the families who took part in the questionnaire phase stated that massage had made either a small difference or no particular difference. Having carefully examined these participants’ questionnaires, it is unclear why this was the case. However, I think it prompts us to recognise that for some families, infant massage can have a negligible effect, and for others it can be negative.

Analysis of the themes across the data (see Chapter 6, Section 6.7 and this chapter, Section 7.3) highlighted two elements which I believe are critical to the effectiveness of infant massage, and particularly for families who face challenges, namely timing and the environment. For Family A, the infant massage group sessions occurred at a time when the issues they faced had receded; Mother A commented that she was unsure how she would have managed her emotions had they accessed an earlier group. Family B had a difficult experience in the first set of group sessions; Baby B was either very unsettled or sleeping for much of the programme. Mother B later reflected that she had been nervous and unsure of how to soothe him, and this dynamic may have created a ‘negative feedback loop’ (Celebi, 2013).It also transpired that the family had been working through a

stressful situation which Mother B outlined in her family description (Chapter 6, Section 6.4.2). It would seem that both the timing of the programme and aspects of the group environment were difficult for this family. They later completed two individual sessions in more intimate surroundings, where Baby B appeared more relaxed, and through which Mother B gained confidence to join a second group programme some weeks later.

Whilst we have already discussed the potential barriers and pressures associated with group activities, this is viewed largely from the perspective of the carers. For Baby B, it seemed that the group environment, which appeared to stimulate and excite Baby A, was initially somewhat overwhelming. Whilst Baby A seemed gradually less focused on the group and increasingly focused on Mother A across the programme, Baby B appeared to become more accustomed to the group in the latter weeks, and increasingly exploratory in the individual sessions. I describe these contrasting responses as 'being social' (Baby A) and 'becoming social' (Baby B).

I believe that we need to think carefully about *how* we offer infant massage to all families, particularly when they face other challenges in addition to the transition to parenthood. For some families, individual or small group programmes may be more suitable, and this may provide a base from which they can move to a massage group. Additionally, as exemplified by Family B, we may need to consider families' engagement with massage over a longer timeframe than the relatively short period allowed for an individual programme. Underdown, Norwood and Barlow (2013)

found that group infant massage programmes appeared to be unsuccessful for families they described as ‘high risk’, prompting ‘intrusive behaviours’ amongst some carers. Whilst I am uncomfortable with the descriptive language used, I can appreciate their recommendation that for families facing very complex challenges, additional support alongside the group sessions would be more suitable.

However, we must also appreciate the economic pressures faced by services offering infant massage. Whilst many staff appreciated the need to offer a more individualised service to families, they also spoke of financial, practitioner and centre capacity issues which were becoming increasingly challenging in a climate of funding reductions. A supportive solution that emerged from Family B’s experience of infant massage was one of peer support. During the co-interpretation phase of the video analysis, and considering the ethical drivers of this study, I asked Mother B if participating in the project had added to the family’s pressures. She was quick to dismiss this, informing me that being part of the study had given her the impetus to return. I interpreted this as indicative of Mother B’s determination and commitment, but also that engagement with the project and me as the researcher may have offered a form of peer support.

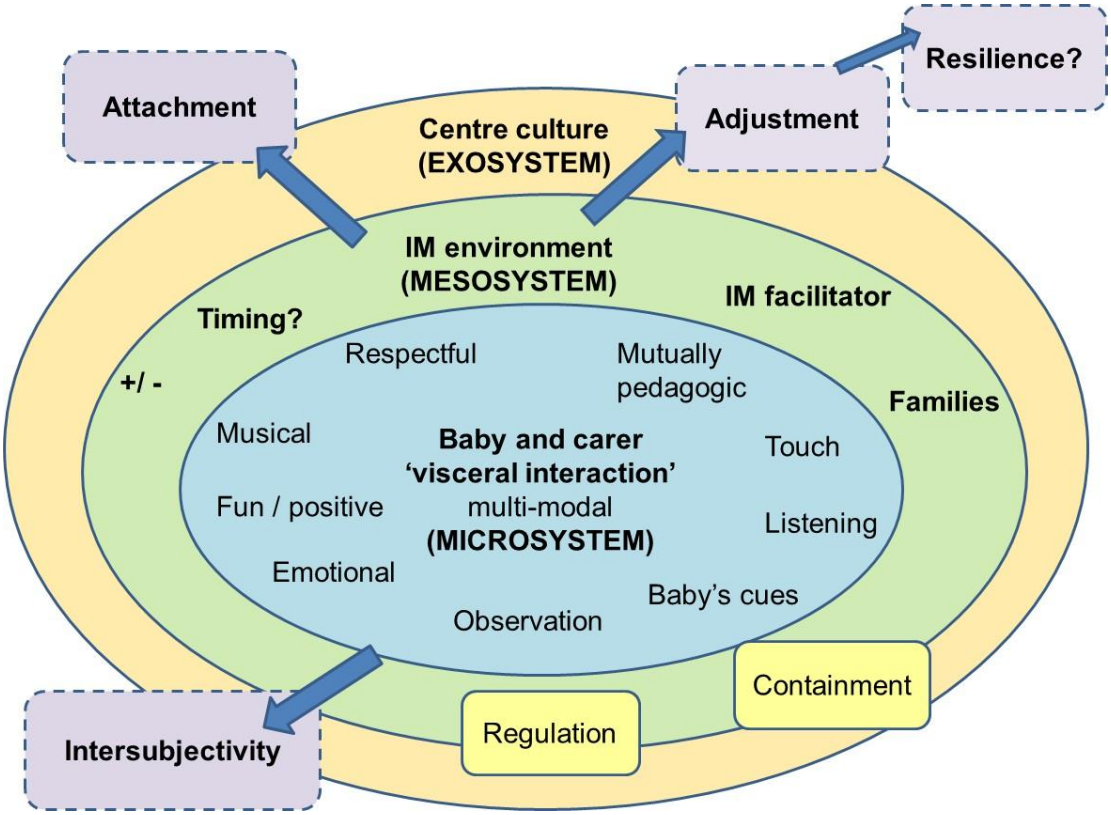
I put this concept to her, and asked for her views on the utility of peer support for families who may struggle to massage or who find the group environment challenging. Mother B said that having someone to meet at the sessions could be helpful, potentially combatting the experience of having an unsettled child amidst a group of families apparently adapting to massage with ease. It is my view that

further development of peer support connected to infant massage, and research around its effects are needed.

7. **If infant massage is shown to have a positive impact for families facing challenge or under stress, what training will we need to provide to key workers (e.g. health visitors, midwives, social care and children's centre staff) to ensure families are supported to engage with the service?**

Participating practitioners highlighted a need to increase awareness of the benefits of infant massage amongst a range of colleagues. This included some children's centre colleagues, who were viewed by one practitioner as generally positive about the service, but lacking an appreciation of the longer term goal; to support children's academic resilience. GPs, social workers and midwives were also identified as colleagues who may benefit from further input. One practitioner, who was a trained social worker, commented that current social work training involved attachment theory but very little around child development. Indeed, an Irish study exploring the NICU staff perceptions of the emotions of parents and the developing preterm infant-carer relationship (Twohig *et al*., 2016) found a lack of attachment development training amongst practitioners. It would seem that there is more work to be done around early childhood practitioners' understanding of the benefits of infant massage. The practitioners who participated in the focus group at Site 1 suggested that the findings of this doctoral study might be used to develop awareness training materials.

Diagram 9 – A conceptualisation of the function of infant massage; 'visceral interaction'



7.3.1 'Visceral interaction'

The next section will set out my innovative conceptualisation of the function of infant massage (Diagram 9, previous page), connecting it with the key theoretical frameworks, concepts and themes identified through this study. This model will, I believe, address the project title below:

> **How infant massage enhances pedagogical attachment in families facing challenging circumstances**

I conceptualise the practice and environment of infant massage as offering a unique opportunity for the infant and carer to engage in a state of what I am calling **'visceral interaction'**. I view this as the earliest and perhaps most sophisticated of conversations; it is a deep and multi-modal communication, engaging the senses and bodies of both participants. It involves the carer's 'nurturing touch' (McClure and the IAIM Circle of Trainers, 2005), and careful listening to and observation of the infant's bodily, facial and vocal communication cues. This focused observation enables the carer to learn about the nuances of their child's behaviour; their likes and dislikes, signs of assent and dissent, and critically to recognise them as a capable individual who *is communicating* through a range of channels (Doherty-Sneddon, 2003). Indeed, a number of families identified this multi-faceted dialogue which appeared instinctive to the participating babies, and which drew the carer to engage more holistically, deepening the interactions. The pedagogic opportunities are mutual; the infant also has focused opportunities to learn about the carer and

loving touch, to experience a new environment, and to observe and engage with other babies and adults. As an interaction that is rooted in careful observation, in gaining permission, and in responding sensitively to babies' cues, infant massage has the power to communicate a deep respect for the infant. It would follow then, that this would provide early information to the baby's developing internal working model (Bowlby, 1997) of current and future relationships as respectful and responsive, leading to more secure attachments, and enhanced self-esteem and resilience in later childhood (Schofield and Beek, 2006).

The act of massaging together also appears to activate a range of emotions, for example nurturing touch to express the carer's love and respect for their child. Indeed, the IAIM massage routine incorporates a stroke entitled 'I Love You' which in my view gives another powerful message to the infant. It also gives families time and space to share a positive experience, to be joyous together; this was particularly evident in the video footage relating to Family C, and highlighted by twelve of the eighteen families who participated in the questionnaire phase.

Massage seemed strongly connected to relaxation; seventeen out of eighteen families who participated in the questionnaire activity as well as Families A, B and C, reported improved calmness and relaxation, and particularly in relation to their infants. Touch is our earliest channel of communication (Montagu, 1986), and a key element of infant massage. Furthermore, touch and music in combination have been associated with reduced pain amongst infants in NICUs (Qiu *et al.*, 2017). It is thought that through touch alone, the carer can regulate and alter the infant's

emotions (Jean, Stack and Arnold, 2014). Indeed, research has found that touch was used instinctively by parents with hearing loss to enhance interaction with their infants, and that it increased opportunities for joint attention, a key channel for infant learning (Paradis and Koester, 2015). Touch appears powerful when combined with other senses; Abu-Zhaiya, Seidl and Cristia (2015) found that touching body parts in combination with vocal cues supported word acquisition amongst 5-month-olds, which seems particularly relevant to infant massage.

My view is that visceral interaction through massage also provides optimal conditions to support intersubjective interactions. This relates to a shared state of mind, and an emotional and social exchange between individuals. Primary intersubjectivity, occurring between birth and 9 months (Braten, 1998) is expressed through gestures, vocalisations, and facial and bodily expressions between the dyad (Trevarthen and Aitken, 2001), and is a mode of communication which focuses solely on the interaction itself (Fivaz-Depeursinge, Lavanchy-Scaiola and Favez, 2010). I believe these elements can be enacted through the practice of infant massage. The act of singing during massage appeared to visibly soothe the participant babies (Babies B and C in particular), and may also provide important opportunities for families to introduce Infant Directed Speech qualities into their dialogues. This was modelled particularly effectively by Practitioner 1 at Site 1. Furthermore, it may also support communicative musicality, a channel for sharing emotion which Malloch (1999) viewed as critical to positive infant-carer interaction. The scaffolding offered through shared singing experiences has been linked to enhanced and joyful dyadic exchanges (Van Puyvelde *et al*., 2014), in assisting

children's early relationships (Niland, 2014), and to reduced levels of infant cortisol (Shenfield, Trehub and Nakata, 2003).

In addition to the focused infant-carer ecosystem, which, I believe, equates to Bronfenbrenner's (1979) 'microsystem', the massage group provides opportunities for the baby to engage with other infants and adults. Simultaneous engagement with two adults identified amongst 3 and 4-month-olds was named 'triangular communication' (Fivaz-Depeursinge, Lavanchy-Scaiola and Favez, 2010), and thought to provide an important developmental bridge between primary and secondary intersubjectivity. Triadic intersubjectivity appeared particularly evident in the video experiences of Baby A, who engaged skilfully with his mother, Practitioner 1 and other infants. Indeed, I view the group context as a rich environment which may offer important opportunities for *both* infant and carer. For the infant, born with a drive to engage with others (Stern, 1977; Murray, 1991; Trevarthen, 1998; Trevarthen, 2011), *"…the scientist in the crib…"* (Gopnik, Meltzoff and Kuhl, 2001b, p.181), I believe the infant massage group offers important opportunities for the infant to connect their intimate world with other worlds, to be and become social. Massage *with* their carer and *within* a group environment offers a social test bed for learning.

Participating practitioners spoke of developing networks of peer support through infant massage groups, and alongside this, two people foregrounded the concept of containment (Bion, 1962); the drive to recreate the containment of the womb amongst infants with complex needs (Practitioner 6), *and "…circles surrounding*

and containing the baby, the mother, the group within the organisation." (Practitioner 13, FG:AR:1/2:S1:LR:010716). This suggests to me a fusion of Bronfenbrenner's (1979) ecology of human development concept (where the individual's development is seen in the context of and interacting with a series of nested environments) with Bion's (1962) concept of container-contained (explored earlier in this section).

I would agree, observing at an early stage the focused dyadic ecosystem (the microsystem) appeared set within the social context of a group (the mesosystem) and the children's centre culture (exosystem). Interacting with this were the positive and challenging elements of being in the massage environment, which could also relate to participants' feelings of being safely held. Underdown and Barlow (2011) highlighted a facilitator's use of singing as an effective approach in group containment; within this a mother used quiet singing to contain her distressed baby. Similarly, Gerhardt (2015) identified the concept of the carer as the infant's 'regulatory partner' or 'emotional coach'. In the infant massage context, I view the dyadic partnership to be encircled by a further regulatory environment; the infant massage facilitator and the group.

However, it is also of note that out of three families who took part in the case study work, and eighteen families who joined the questionnaire phase, the social and peer support benefits were foregrounded by just four families. This may suggest that focusing on the infant-carer relationship was a greater priority for families who were facing challenges. Given that stressful life events have been connected to

difficulties around attachment (O'Leary and Thorwick, 2008; Olza-Fernandez *et al.*, 2014; Pennestri *et al.*, 2015) and parental emotional availability (Falco *et al.*, 2014), a programme prioritising high quality infant-carer interaction, a critical factor influencing attachment (Rutter, 1972) can offer families important opportunities to connect, as well as respite from the difficulties they face. Indeed, Mother B foregrounded both elements in the family's case study (Chapter 6, Section 6.4.2), remarking that the focus on infant-carer interaction was key to a deepening attachment.

In addition to the nested environments interacting with the infant and carer (Bronfenbrenner, 1979), and the containing (Bion, 1962) or regulatory (Gerhardt, 2015) activities of the parent, infant massage facilitator and peer group, the study also identified the formation of a series of attachments. Firstly, infant massage was seen by practitioners as a service that supported the attachment of the family with the centre and the infant massage facilitator. Secondly, families and practitioners reported that joining the infant massage group enhanced their dyadic attachment, and when these skills were shared with the infant's family, this enhanced within-family attachments. Thirdly, for some families, ongoing attachments were formed with other families through the group.

The early weeks and months of life are a time of transition and adjustment for the infant and carer. As highlighted by Practitioner 7, the infant must adapt to life outside the protection of the mother's womb; to new sensory experiences, people and environments. For new parents and carers, this period can be a mix of positive

and challenging emotions; a time when parental anxiety is to be expected (Celebi, 2013). A recurring theme across the literature review for this study (Chapter 2) was that the early weeks and months were a time of adjustment; Vicente, Verissimo and Diniz (2017, p.114) named it *"…a period of growth and adaptation…"*, and connected participation in infant massage programmes to improved transitions to parenthood. When a family faces other challenges in addition to this adjustment, there is additional pressure, as seen across the literature relating to the concepts examined in Chapter 2.

I am of the view that infant massage as a practice is positive for most families, offering critical scaffolding for dyadic connectivity and parental and infant wellbeing in particular. Research suggests that supportive networks offered by families, friends and practitioners play a critical role in adapting to parenthood, especially when families face additional pressures such as child illness which could affect attachment (Barr, 2013; Habersaat *et al*., 2013; Orit-Taubman and Spielman, 2014). However, we need to consider *how* we include and support families when they face challenges in addition to the transition to parenthood. For some families, a group context does not seem to offer them the regulation and containment they need to participate, and this has been articulated particularly clearly through Family B's vignettes and reflections. Whilst the infant massage facilitators who participated in this study had a strong commitment to the practice, some expressed reservations that resourcing was a limiting factor around effectively supporting the needs of all families.

It is my view that a peer support system could offer the personal experience and capacity to function as regulatory partners to families; encouraging them where appropriate to access and continue with programmes. Additionally, we may need to consider frontloading our limited resources to ensure that families can be offered the programme through individualised and group provision, or a mix of the two. Furthermore, whilst the infant massage environment may support families' transitional resilience over a relatively short period of time, we also need to consider family and infant resilience over the longer term. As Rutter (2007) and Werner (2012) point out, resilience is a longitudinal and dynamic concept, and thus we need to consider the influence of infant massage on family relationships, wellbeing and resilience over the longer term. In my view, there is a need for further longitudinal work around this, as well as an exploration of the effects of peer support on families' capacities to engage and stay with infant massage provision.

In sum, this conceptualisation views infant massage as offering the optimal conditions that facilitate a multi-modal and mutually pedagogic communication between the infant and carer which I termed **'visceral interaction'**. This involves the carer's careful listening to and sensitive observations of the infant's multi-channel cues. It also includes the use of 'loving touch' (McClure and the IAIM Circle of Trainers, 2005), the engagement of emotions and musical interactions, and a demonstration of a deep respect for the child's wishes and rights. The dyadic microsystem is set in and interacts with a series of nested environments; the infant massage group guided by the infant massage facilitator (the mesosystem), and the children's centre and its culture (the exosystem) (Bronfenbrenner, 1979).

The carer, group and infant massage facilitator have important regulatory (Gerhardt, 2015) or containment (Bion, 1962) roles; to support the regulation of the infant, the dyad and the group of families. Visceral interaction through massage and its interplay with the encircling environments supports the developing intersubjective and attachment relations between the infant and carer, and potentially the dyad's connections to the wider group. It also provides stimulating opportunities for the infant to explore and learn about their expanding social and physical world, and important scaffolding for carers adjusting to the joys and challenges of parenthood.

The foundations laid through the infant massage environment would appear to influence the child's future learning; Pascal and Bertram (1996 and 2009) found that an 'effective learner' was a child who was able to explore freely, inventively and with joy, and through this develop their learning. Critically, the freedom to explore was linked to attachment security and sense of situatedness relating to the people and environments in the child's life world. Furthermore, a study which explored the use of Family Nurture Intervention in the NICU featuring touch, eye contact, and first language and emotional maternal speech found that there were marked enhancements in infant neurodevelopment, social connection and attention (Welch *et al.*, 2015). Infant massage incorporates and promotes multi-modal, loving and consistent exchanges between the infant and carer, which, in my view, connects it strongly with these studies; its nested environments appear primed for supporting these critical early learning and attachment relationships.

The conceptualisation articulated in this thesis also has links with the work of other researchers. In a diagrammatic conceptual representation, Underdown and Bennett (2011) positioned infant massage as a multi-modal technique supporting early relationships and infant mental health, located in a context of health visiting and midwifery guidance. I view the conceptualisation presented through this doctoral thesis as complementing and extending this earlier work, making detailed connections between the practice of infant massage with theory and research around intersubjectivity, attachment, touch and adjustment.

7.4 The strengths and limitations of the study (reflections at the close of the study)

This doctoral study has worked collaboratively with a small group of families and practitioners, and has developed a fine-grained understanding of the infant massage experience around times of challenge. Whilst strongly connecting the practice of infant massage to positive early infant-carer relationships, this study has also explored the more difficult aspects of the experience, leading to a balanced picture of the strengths of the service as well as the areas which may require further consideration. I am also of the opinion that this project aimed for the highest ethical standards, adhering closely to the EECERA Ethical Code for Early Childhood Researchers (2014). Key to this has been a deep respect for families and practitioners, their multiple viewpoints and experiences, and a collaborative and democratic approach to knowledge construction. Furthermore, the issue of informed consent was carefully considered (Chapter 3, Section 3.7), and an

innovative matrix of approaches developed to ensure, as far as possible, that this was achieved. This included an information video for participants (link below) which was inspired by the researcher Helen Kara (2015b), and aimed to offer families the opportunity to revisit a project overview alongside family members and friends.

https://youtu.be/PySXIFJHtpE

The study also aimed to work in an inclusive manner and from a strength-based perspective, guiding principles in the selection of the methods. The use of video and video co-interpretation foregrounded the often overlooked experiences of the participating infants, and supported families to reflect positively on their developing parenting capacities. Indeed, video interaction guidance, a technique that supports parents to reflect on the strengths of their caring behaviours is recommended by the National Institute for Health and Care Excellence (NICE) (2012). Furthermore, the use of collage with participant families as both a mode of expression and prompt for a collaborative conversation, supported families to articulate their encounters with infant massage, and allowed us to gain proximity to their lived experiences (Johansson, 2003; Pramling Samuelsson and Johansson, 2009).

Lastly, I believe that this project has undertaken a thorough exploration of the research focus through extended engagement with the participants and research sites, has triangulated methods, data and participant views, provided a detailed and meticulous audit trail, and has shown clarity around researcher subjectivity (Chapter 3, Section 3.5). Together, these features ensured that the study was both

trustworthy (Guba and Lincoln, 1985) and at the cutting edge of praxeological (Pascal and Bertram, 2012) research methodologies.

It is also important to highlight the limitations and boundaries of the research. The project worked with a small number of participants; twenty-one families and thirteen practitioners in total. Whilst the questionnaire phase involving eighteen families aimed to develop the beginnings of the transferability of the project, it does not claim to be of the scale that may be required to develop an 'evidence base'. Indeed, following Denscombe (2010, p.53), this project's aim was *"…to illuminate the general by looking at the particular."* Additionally, this study did not use approaches such as randomisation and control groups or start and end point measures. The exclusion of families from a programme which from the outset was thought likely to be beneficial was viewed as ethically problematic.

Furthermore, the use of standardised questionnaires and attachment measures, whilst useful in the context of large scale studies, was thought likely to restrict the detailed understanding that the study aimed to achieve. The families who participated in this project were carefully identified by participating practitioners, and approached on the basis that their involvement in the project would not, to the best of our knowledge, contribute further pressure in addition to the challenges they faced. Ensuring that the project did not cause participants harm at a time when they may be considered 'vulnerable' was a critical ethical consideration underpinning the project. Hence, the matrix of approaches to informed consent was devised and enacted (Chapter 3, Section 3.7.2).

7.5 The contribution to new knowledge: Conceptual, theoretical and methodological claims

It is my view that this study makes new knowledge contributions in four key areas. Firstly, this project has provided detailed vignette descriptions of the experiences of infant massage from the individual perspectives of three families around times of challenge. It is my view that these observations and interpretations offer a deepened understanding of the potential benefits of the practice for families facing challenge, balanced against the programme features that contributed barriers to participation. Secondly, the study has developed a conceptualisation of infant massage as a complex and multi-modal 'visceral interaction'; a microsystem in a series of nested environments (Bronfenbrenner, 1979) supporting intersubjectivity, attachment and infant and carer transitions (Section 7.3.1). Thirdly, this doctoral study has contributed an innovative matrix permitting a comprehensive approach to informed consent. This included the development of an information video, a technique explored by Hammond and Cooper (2011) and Haigh and Jones (2007), and viewed as an effective and accessible way to offer participant information. Fourthly, this project has provided a comprehensive account of a sensitive enactment of praxeological values in research; a collaborative methodology where participant families were co-researchers of their own unique experiences.

7.6 Summary and critical reflections

This chapter has explored and examined the relationships between the overarching themes identified in this study. It has also revisited the seven sub-questions and main research question framing the project, considering participants' responses

elicited through the fieldwork stage, and connecting them to theory and research. Infant massage is viewed as a critical first service for families; foundational to other programmes, creating an important attachment to the centres, and supporting the early identification of difficulties. As a programme based around compassion and loving and secure relationships it provides an important contrast to toxic agendas such as the 'Troubled Families' programme (Chapter 1) where families are viewed as the source of the challenges they face. Infant massage offers a focused environment for infant-carer interaction which can support early relationships at times when life challenges can affect this capacity. However, timing, an appropriate environment and sensitive support were found to be critical to the effectiveness of the programme.

This chapter also introduced a concept which I termed 'visceral interaction'. binding together the central themes identified in Section 7.2. It identified infant massage as facilitating a complex multi-modal infant-carer communication, intersubjective interaction, and early attachment relationships. This was located in a series of nested and supporting environments, fusing theories developed by Bronfenbrenner (1979), Bion (1962) and Gerhardt (2015). Finally, the study was examined in terms of its strengths, limitations and contributions in terms of new understanding, concept development and methodology. Moving forward, Chapter 8 will identify the key messages relating to infant massage, and consider the questions and recommendations arising from it.

Chapter 8 – Final reflections and next steps

8.1 Introduction

In this closing chapter I will complete a final synthesis of the main findings of this doctoral project in relation to the research questions posed, and make a strong claim for the study's originality. I will then consider the questions arising from the project, suggestions for future research, and present my closing thoughts.

8.2 Final reflections on the findings and original claims

This research project has focused on the experiences of infant massage amongst a small group of families who faced individual personal challenges. The literature around attachment (Chapter 2) has highlighted that challenges such as early infant illness and prematurity, parental mental health, and difficult life experiences can disrupt the critical early stages of the infant-carer attachment process and security. This in turn can affect the young child's early social and educational experiences. Indeed, practitioners who participated in this study stated that families in their localities faced a wide range of personal challenges which could interrupt carers' capacity to connect with their children, and also with services.

Infant massage was offered by participating sites as practitioners were convinced of the programme's ultimate capacity to enhance the life chances of young children as citizens and learners. It was viewed as a foundational service; connecting families to centres and staff, offering important early opportunities to identify difficulties, and

supporting critical early infant-carer attachment relationships. I would strongly suggest that these are key features of effective 'Early Intervention' as defined by Allen (2011) (Chapter 1).

Families who participated in this study found that infant massage offered a unique and focused environment encouraging them to observe and learn about their children, enhanced the early attachment relationships, and supported infant physical health and development. The massage context facilitated a complex multi-modal dyadic interaction, encouraging carers to attune to the sophisticated range of channels used instinctively by infants. For most families this was a positive and regulating experience, and the benefits for the families facing challenging circumstances who participated in this study appeared to be strongly correlated with those claimed more generally for new families. Parenting is, as Practitioner 6 described it, 'a great leveller'; families have unique circumstances, yet they also have many experiences that are shared.

Whilst this study found that infant massage was beneficial for the majority of participating families, it also identified that timing and environment were pivotal to their experiences of this service. Groups were acknowledged by families and practitioners alike as difficult for some, and when infants and carers did not feel sufficiently contained (Bion, 1962) and regulated (Gerhardt, 2015), there was a risk that the experience could compound negative self-perceptions at a sensitive time in the infant-carer relationship. The massage environment is an intimate one, and we need to consider how we best support families to feel safe to participate in this vital

service. It also seems that there is more work to be done with colleagues working with young children and families, to enhance understanding of the function and benefits of the programme, and to work together to connect families with this.

This study claims four key contributions to knowledge around infant massage and research practice. Firstly, the project has addressed a clear gap in the research literature, developing fine-grained observations and a deepened understanding of the effects of infant massage for three families around challenging circumstances. Secondly, binding the key themes and theoretical frameworks underpinning the project, a clear conceptualisation of the function of infant massage has been developed. It facilitates a multi-modal engagement which I term 'visceral interaction', and is situated in a series of containing (Bion, 1962) and regulating (Gerhardt, 2015) nested environments (Bronfenbrenner, 1979). Thirdly, it has developed an innovative research design and a comprehensive matrix approach to ethical informed consent. Fourthly, it offers a detailed account of a sensitive interpretation of a praxeological approach to knowledge construction *with* participant families.

8.3 Suggestions for research and early years practice and closing thoughts

This study and the underpinning literature review have identified a need for research exploring the longitudinal impacts of infant massage for families facing challenging circumstances. Whilst the findings of this project suggest that the programme is usually a positive experience, supporting dyadic and familial attachment and learning, regulation, infant health and development, and parental

confidence, the outcomes are relatively short-term. It is my view that the programme may support families adjusting to life in the early weeks and months after the birth of a new child, but we cannot extend this claim to enhancing family or child resilience. This is a dynamic concept that needs to be explored over a longer timeframe (Rutter, 2007; Werner, 2012). Indeed, given that infant massage has been an important component of childcare, passed through the generations in many parts of the world, countries and cultures with this rich tradition may be ideally placed to participate in future longitudinal studies.

This project has unflinchingly explored the barriers around participating in infant massage programmes; the reflections of Mother B shed particular light on the challenges associated with engaging for the duration when the infant massage experience is a difficult one. An incidental finding was that participation in this research project, alongside Mother B's commitment to her child's wellbeing, appeared to be a factor which supported the family to continue with the programme. It is therefore a recommendation of this study that peer mentoring and buddying systems are piloted alongside infant massage programmes, and that further research is carried out to explore the effectiveness of this in relation to families' feelings of containment and regulation. This study would also recommend further research with families who did not access infant massage provision from the outset, or were unable to continue with the programme. This is needed to better understand from their perspective the factors contributing to this, and how they may be better served. Indeed, the literature review underpinning this research project found that there was a paucity of research focusing on the impacts of infant massage on the pedagogic and attachment relationships between infants and male

carers. Furthermore, a number of families who participated in this study described teaching the massage techniques to partners and older children, and found that this enhanced attachments with the secondary carer and across the family. This study also suggests further work focusing specifically on the influence of infant massage on male carer and infant relationships, as well as a more detailed exploration of the intra-familial effects of the practice.

It also the intention of this study that the findings are used to support real world practice and services in the early years, with the ultimate aim of improving the life chances of our youngest citizens. For early years and infant massage practitioners as well as budget-holders and partner organisations, the model of visceral interaction could support an enhanced appreciation of the richness and significance of the infant massage environment for infant-carer dyads. For key persons working in nurseries with young babies, visceral interaction appears to be an enactment of the practices thought to be essential in high-quality child care described by Elfer *et al.* (2013) in a letter to The Guardian and published online:

> What matters most is the quality of interaction between babies, young children and staff. Babies and young children attending nursery for long hours need to feel individually noticed, thought about and responded to sensitively and consistently.

Moreover, the conceptualisation proposed by this study recognises the child as a sophisticated multi-modal communicator and social individual; the films developed

through the project could offer important learning opportunities for practitioners working with young infants in nursery settings.

The research also foregrounds the critical roles of the environment and group facilitator in supporting families to feel safe to participate; the practitioner needs to maintain a strong focus on creating a holding environment, and on acting as a 'regulatory partner' (Gerhardt, 2015) to families. This project could offer important insights around the sensitive facilitation of group learning environments, and potentially work with adults returning to learning. Furthermore, the study also highlights the critical need for individuation, sensitivity and working closely *with* families; seeking to recognising their uniqueness rather than to establish their homogeneity.

It is anticipated that the materials developed through this study, with participants' permissions, will be used to develop accessible training packages focusing on the critical significance of sensitive and multi-modal interactions with very young children, and that they will be shared with interdisciplinary groups of practitioners working with children and families. Furthermore, having identified a range of outcome assessment techniques across the participating sites, the study findings will be used to develop a supportive assessment tool to be used collaboratively by families and practitioners. Finally, it is the aim of this project that the findings will be shared with local and national organisations and decision-makers, with the intention of positively influencing strategy and investment in the early years.

The findings of this study indicate strongly that infant massage is an important service, and we now need to think further about *how* and *when* we offer it to more effectively include families. It offers a prime environment for a potent multi-channelled means of communication, supporting infant-carer learning and attunement, and facilitating the development of intersubjective engagement and attachment relationships. For families facing challenging circumstances, infant massage can offer important respite from these pressures, and a focus on building the early attachment relationships which may be disrupted by them. Fundamentally, beginning to 'swing together' (Bjorkvold, 1992) allows the carer to transmit strong messages of love, respect and recognition for the child as a unique and capable human being with rights. This, I believe, encourages the child to build a positive internal working model of self (Bowlby, 1997) and lays essential early foundations for becoming a capable learner (Pascal and Bertram, 1996 and 2009). It is my view that the service should revert to a universal offer for families, and that funding and resources are frontloaded to reflect this.

Attachment is a universal issue (Bryant, Ridgeway and Lucas, 2016), and it is critical that *all* new families are supported to develop the early secure relationships that are foundational to children's social and learning outcomes. However, we need compassionate and strength-based services to do this. Infant massage is, in my view a prime example of this, promoting three vital and universal messages: inclusivity, respect and connectivity.

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